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### August 1996

# MACNEWS

- Umax does Mac OS The Umax Pulsar 1500 is a ready for a dual-processor upgrade.
- 12 Claris Home Page — Claris' product lines move onto the Internet.
- **Apple Technology Symposium** Scalise will deliver the keynote at local conference. 15
- Apple tops surveys Macintosh users tend to buy Macs again, and Apple ships the most multimedia PCs.
- Apple's new Servers Apple's new servers run IBM's version of Unix, and Apple is distributing Motorola servers that run Windows NT.

# QUICKCLICKS

- **Color QuickCam** Inexpensive desktop camera now does colour.
- WebArranger Don't get lost when you go online.
- **Now Contact/Up-to-Date 3.6** Contacts manager enters the age of the Web.
- **Bryce 2** The fun and effective way to create landscapes.
- **PB Bear** The cutest bear for the youngest Mac users.

# FEATURES

- **Window to the Web** Microsoft's Internet Explorer is the first serious challenger to Netscape's Navigator, whilst Apple's Cyberdog is an alternative to browsers altogether.
- 50 The state of eight — A detailed preview of the oft-delayed Mac OS 8, also known as Copland: it's structure, interface and features.
- Buyer beware! Computers, programs and peripherals don't always last as long or work as well as they should, but consumers are not without recourse.
- Still online? The Internet may be growing exponentially, but bulletin boards and proprietary online services are still vying for the attention of your modem.

## REVIEWS

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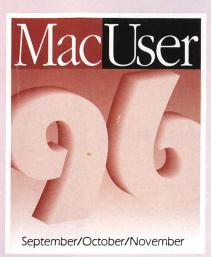
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## COMING SOON

#### Removable storage

The market for removable storage products is hotting-up again with SyQuest and lomega in particular going headto-head in a price-and-features war. We comprehensively lab-test a variety of removable storage products for capacity, speed and reliability.

#### Genealogy

With a Mac, some software and a modem, you can access genealogical databases on opposite sides of the globe; sort your leads; and present your results as colourful wallcharts or detailed reports.

#### Mobile messaging

How do you connect your PowerBook or MessagePad to the world at large? We look at portable and PC Card modems; cellular phones and cellular modems; and the networks and techniques that will keep you in touch when you're on the go.

#### The Lone Ranger

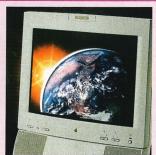
The Lone Ranger had Trigger: you've got your Mac. Life can be lonely when you're the only Mac user in a DOSbased department in a Unix-based organisation. But don't just survive — you can thrivel

#### **Reviews**

MYOB 6 • Fargo FotoFUNI • Encarta '96 • Cybersound VS Let's KISS
 I Spy
 Discover Programming for Macintosh

Forward listings are subject to change without notice.

# BEHIND THE COVER



This months cover is the work of illustrator John Lycette.

# **EDITORIALLY SPEAKING**

# The more things change...

bservers of the computer industry are so used to change that they would probably only notice if it didn't happen. For those of us producing magazines such as Australian MacUser, it's a very good thing that the computer industry changes as quickly as it does, since it produces a constant stream of newsworthy material.

This month, change has come to Australian MacUser itself. Jeremy Templer has decided to move on from the editor's hotseat to take up new challenges in online publishing. In doing so he has provided me, the incoming editor, with some new challenges of my own.

My background is in desktop publishing and magazine editing, with nearly all of my last three years spent editing Desktop, Australian MacUser's sister magazine. Although taking a step away from Desktop has been difficult, I'm consoled with the knowledge that I will remain involved with that title as its Managing Editor, and I am also relishing the challenge of maintaining the very high standards set by Jeremy in Australian MacUser. I bring to the magazine a keen appreciation of computer technology, a fond regard for the Macintosh, and a passion for the publishing process.

Magazines are organic, and capricious entities; they need to be directed carefully and well nurtured; with the right stewardship they will flourish. While a new editor at the helm must necessarily bring some new directions to any magazine, Australian MacUser is in very good shape and is travelling a clear course. Together with Steven Noble, Australian MacUser's assistant editor, I intend to apply the ancient wisdom that things that ain't broken don't need fixing, and I will keep the magazine on a steady course.

This is not to say that Australian MacUser is locked into a pre-ordained trajectory — as long-time readers will attest, the magazine has made steady progress extending the depth of its coverage, the breadth of its industry support, and the size of its readership. I'll be working only to further this process.

The first initiative readers can expect is an invitation to take part in a reader survey. The magazine already enjoys feedback and constructive criticism from a wide range of correspondents. I hope that this willingness on behalf of the readers to convey opinion and criticism can be translated into a comprehensive analysis of the magazine and it's contents.

With this information, we'll be able to fine-tune Australian MacUser to make sure that despite this editorial transition, and despite the constant hustle of the computer industry, the magazine continues to provide its readers with the quality news, reviews and analysis you've come to expect from it.

> R Koxworth Richard Foxworthy,

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### Local repair of MessagePads

After recently cracking the screen of my MessagePad 120, I have been trying to get it repaired. It is not covered by the warranty, nor do I expect it to be. However, I was not prepared to be told by my reseller that no repairs to MessagePads can be made in Australia. His suggestion was to buy a new one! I got the same story when I rang Apple Australia.

To be blunt, I think this attitude is appalling. Apple in the US is able to replace MessagePad screens (for about \$US175, I'm told), and in fact I am going to have to send it over there at great expense in order to get it fixed. I am sure most MessagePad owners are not aware that any damage not covered by the warranty, no matter how slight, will not be repaired by Apple Australia. Any enquiries to your reseller or Apple will be met with the response "There are no servicable parts in a MessagePad." As a long-time Apple fan who has purchased many tens on thousands of dollars worth of Apple products over the years, I am sorely disappointed by Apple's dismissive and unhelpful attitude in this matter. I have to seriously consider whether I wish to continue supporting a company which seems to be more interested in selling new computers than supporting those who have already bought one.

Ben Langton Drummoyne, NSW

Ed: Ben, after-sales service is certainly a topical issue at the moment, which is why you'll find the article 'Buyer Beware' on page 62 of this issue. We also forwarded your letter to Apple Australia, and the following response was provided by Newton Systems Manager Steve Hall:

Unfortunately, due to the specialised manufacturing processes required to create MessagePad products, it is generally not possible to provide a simple repair procedure for replacement of MessagePad components, such as the screen, outside of the factory.

Existing Apple Service procedures provide MessagePad users with an exchange option on their faulty unit. This allows non-warranty damaged units to be exchanged at significantly less than the cost of new product. In general such replacements are insurance claims, as most users have safeguarded their MessagePad products against theft and accidental damage during use. Under warranty, Apple Computer replaces the complete unit for the customer.

A number of assemblies in the MessagePad product are factory-only processes. Apple Computer Australia has been assessing the viability of establishing a local 'major component' relacement program. Should this prove feasible, Apple will advise details in the latter part of 1996.

### Dear MacroFan...

Your correspondent, Macro-Fan (Australian MacUser, May 1996, page 89) might be lucky because MacroMaker will run under Systems 7.0 and 7.1 on many older Macs.

Normally, to add an extension to System 7.x, you drag its icon onto the System Folder icon. Your Mac then politely requests permission to place the item in the Extensions folder within the System Folder. You click OK and the installation is complete. If you do this with MacroMaker it will finish up in the Extension folder all right but, as forecast by Apple, it will not be read on boot-up and its tape-recorder icon will not appear on the menu bar.

The work-around is to open your System Folder window and drag MacroMaker and MacroMaker Help into that window, taking care not to accidentally drop them into one of the many folders within. With the System Folder open and all internal folders closed, Macro-Maker and MacroMaker Help should be visible; select by Name from the View menu to check this more easily.

Now restart your Mac and, if you're in luck, MacroMaker will be at your service and its tape recorder icon should be sitting on the menu bar. I say "if you're in luck" because it said that this solution will not work on an SE, and I have discovered some other minor quirks during my use of MacroMaker under System 7.1.

I hope this works for MacroFan, as MacroMaker is the tidiest of the macro programs.

George A Thomas East Malvern, Vic Ed: Many thanks George. Hopefully MacroFan is not the only reader that will benefit from your detailed letter.



# PLEASE NOTE NEW ADDRESS

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# theKnife

# An American dream



All the rumours, gossip and latebreaking news that's fit to print. Remember where you read it first.

ver since the infant Knife was left in a picnic basket on the centre divider of the Long Beach Freeway he has been obsessed with fast-moving vehicles.

The Little Sisters of Charity often threw up their hands in despair at their ward's high-velocity hi-jinks with the orphanage's power mower. Growing to strapping utensilhood on a steady diet of Kerouac, the Knife soon became convinced his life's work was to burn, burn like a flaming Roman candle across the American be-bop night, whether he was at the helm of a '56 Chevy or a Sears Kenmore dishwasher.

## My little CPU

Ah, sweet bird of youth! While he still finds calfskin racing gloves enhance his vacuuming gestalt, the Knife now limits his hot rodding to the electronic highways and byways of Silicon Valley.

Blissfully for middle-aged speedsters everywhere, the gone daddies and hep cats at Apple seem equally determined to burn rubber in their quest for CPU velocity. Take the forthcoming Instatower, the company's multimedia machine for the masses.

It seems the boys in the machine shop just can't keep their mitts off this jalopy: Since the beginning of the year, the projected speed of its PowerPC 603e has risen from 100 or 120MHz to as much as 200MHz, and the RAM configuration has jumped from 8MB to 24MB.

Of course, what's a set of wheels without a commensurate pair of speakers? According to the little old ladies in Cupertino, the Instatower will also sport a built-in subwoofer and SurroundSound.

Meanwhile, Mac grease monkeys who want to get under the hood of a Power Mac 8500 or 9500 should find their machinations enhanced by a forthcoming redesign that makes these sedans about as easy to soup up as the idiot-proof Instatower.

#### Spin cycle

Nor are Apple's disc jockeys standing still as the company gears up for its next generation of CD-ROM drives. According to the Knife's fleet of muscle-car mavens, the Power Mac 7600 will be upgraded with an 8x CD-ROM by August, and its PC Compatibility card bundle will get bumped to 16MB of on-card RAM.

And the 7600 isn't the only vehicle due for an eight-cylinder CD-ROM drive. Indeed, developers who have been test-driving prototypes of the aforementioned Instatower attest that their machines arrived tricked out with 8x drives. Nevertheless, Apple still seems uncertain about veering into the fast lane; according to the Knife's cadre of motorheads, the company has been petitioning customers about whether they would prefer a four-banger CD-Recordable drive in place of an 8x CD-ROM.

#### Dead man's curve

Third parties also seem to be getting into Apple's hell-bent-for-leather spirit when it comes to Mac bodywork: Global Village Communication is revving up a cherry V.34 modem card destined to be bundled with the Instatower.

Meanwhile, on the software track, Global is working on an upgrade to its 28.8Kbps Platinum modems that will boost their horsepower to 33.6Kbps. Wopbop-a-loo-bop-a-wop-bam-boom!

Mac users should not feel too smug about Global Village's devotion to their sphere, however, if news about a new OneWorld fax-and-data modem server is any indication.

According to Globelves in the workshop, the new box will work only in conjunction with Windows NT servers, since NetWare was too difficult to write for.

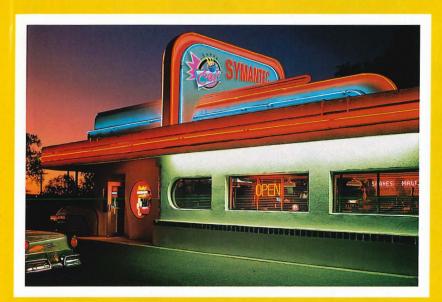
#### Beast with two backs

Thanks to the overzealousness of one of his myriad administrative assistants, the Knife this week has come into possession of certain incriminating dossiers bearing the FBI's distinctive imprimatur. Breaking the seal on the first file folder before him, the Knife caught a whiff of brimstone and for a moment seemed to hear the hellish wails of a thousand doomed souls. Surprisingly, the contents did not include details on J Edgar Hoover's current digs but instead described the latest Mac moves by those clever devils at IBM Microelectronics.

Like the altogether fabulous Mr Hoover, the Knife cleaves to a rather puritanical moral code, a code that does not gladly suffer tiny red nipples on shiny black laptops. To the Knife's way of thinking, it's bad enough that IBM promulgates this kind of behaviour within its own ThinkPad line without attempting to subvert the moral fibre of Mac users.

Alas, in yet another object demonstration of the domino theory, the Knife's operatives report that Big Blue was spotted at last week's PC Expo attempting to lure upstanding corporate citizens into its hotel room. The bait? A ThinkPad running the Mac OS and Windows NT on a 100MHz 603e trussed up with 16MB of RAM and assorted Apple ASICs. Not satisfied with that unnatural coupling, IBM reportedly has designs on yet another freakish hybrid: a 604-based Mac-only desktop machine strapped into a chassis that resembles an Aptiva and boasts many of that worthy's multimedia features. Look for IBM to open the kimono at Macworld Expo in August.

Born to run at the mouth? Just strap your fingers to that velvet keyboard and buzz the Knife at mac\_the\_knife@macweek.com



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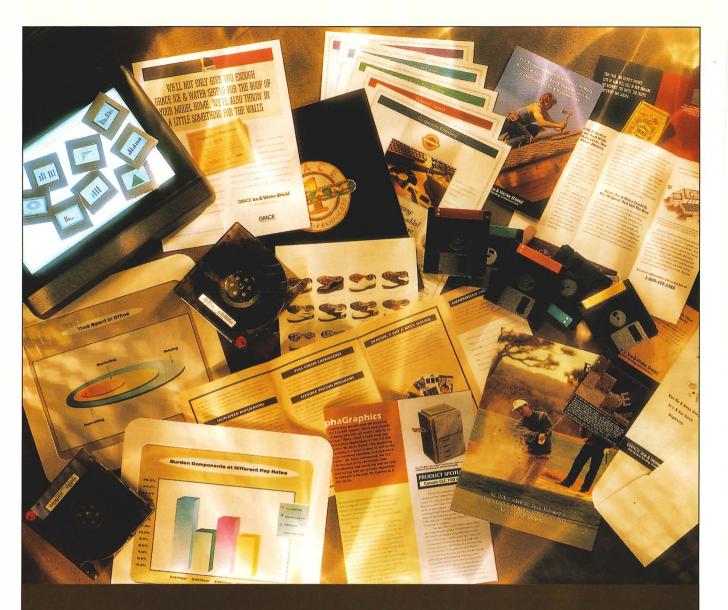
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# MacNews

MAC OS-COMPATIBLES

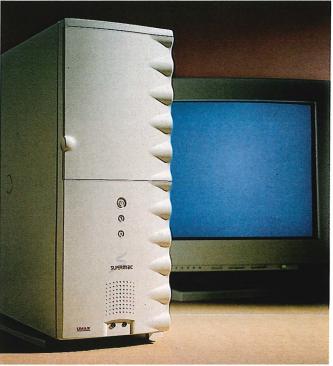
# Umax clone now shipping

n November last year, Umax announced that it had licensed the Mac OS for the Asian market. By the time this magazine reaches the stands, Computer Enterprises of Australia (03 9510 9040, fax 03 9510 8540) should be selling the first product of that initiative, the Umax Pulsar 1500, for a recommended retail price of \$8967 (\$7350 ex-tax). The Pulsar 1500 is distinguished by its support for multiple processors, although initially it will ship with just one.

In its most basic configuration, the Pulsar will ship with a 604 PowerPC processor clocked at 150MHz; six PCI slots: 16MB of RAM that can be upgraded to 1040MB though eight 168-pin DIMM slots; 2MB of VRAM; two GeoPortcompatible serial ports; two ADB ports, an extended keyboard and mouse; a 2GB SCSI-2 hard drive; a 6x CD-ROM drive; 512K of Level-2 cache; a 128-bit IMS TwinTurbo graphics card: System 7.5.3; and 10Base-T and AAUI connectors for Ethernet. Sound in and out jacks are easily accessible on the front of the distinctive bevelled chassis. An optional Mercury card should be shipping by August for a recommended extax price of \$650: it will add support for 100Base-T and Fast/Wide UltraSCSI-3. Later this year, the optional Gemini card will become available: it will add a second processor to the Pulsar, using an Application Program Interface (API) developed jointly by DayStar and Apple — DayStar's Genesis MP

supports up to four processors whilst the Pulsar 1500 supports up to two. The use of multiple processors results in substantial speed improvements with applications that have been altered to support multiprocessing such as Adobe Photoshop and Metrowerks' CodeWarrior.

— Steven Noble



The Umax Pulsar 1500 is sold as the SuperMac S900L in the United States, where Umax has rights to the SuperMac brand, formerly owned by Radius. Notice the easily accessible sound in and out jacks up front.

#### **NEWS THIS ISSUE**

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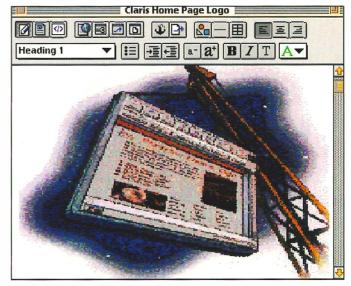
#### INTERNET AUTHORING

# Claris Home Page built on Loma Prieta

Claris has bought its way into the highly competitive Internetauthoring market by acquiring the WYSIWYG Web editor code-named Loma Prieta.

At writing, Loma Prieta has not been shown in public. It is said, the program will let users create HTML documents containing frames, tables, Java applets, multimedia files and JavaScripts. The graphical Web page-layout program will run on Mac OS, Microsoft Windows 95 and Windows NT. Claris said it plans to bring the product to market under the name Claris Home Page.

Dennis Marshall, Claris director of solutions products, described Home Page as one piece in an emerging Internet strategy, which will later include Web-site management and site-hosting services. Claris officials said they are considering developing tools to integrate Home Page with FileMaker Pro and



other products. Analysts said they expect Home Page to mimic the price, shipping date and features of the next version of the leader in this market — Adobe PageMill.

In related news, Everyware has released a version of Tango for FileMaker Pro 3.0 (\$545

RRP, Finite State Software, 03 9459 2417, fax 03 9459 2417). Using Tango for FileMaker, Web authors can place FileMaker Pro databases on the Internet or an intranet without having to write a Common Gateway Interface (CGI) script.

— Steven Noble & James Staten

BUSINESS

# Apple COO puts profits first

Saying that "the glory is not in selling the Macintosh; the glory is in profit," new Apple Chief Operating Officer Marco Landi has laid out his rules of order for returning Apple to stability and profitability.

Landi's remarks at the PC Expo in New York described his expectations for Apple's current organisation. Landi was appointed COO in May to implement the ambitious restructuring plan unveiled by CEO Gilbert Amelio at the Apple Worldwide Developers Conference in June.

Under that plan, Apple reorganised into four main profit centres: Macintosh; Servers and Alternate Platforms; Information Appliances; and Imaging. Claris remains an independent operating unit that also reports to Landi. Under the new organisation, the heads of each hardware division

are responsible for everything from product development and planning to marketing and human resources, Landi said.

Each group's success will be assessed by looking at the bottom line. "I cannot measure by any other method than profit," Landi said.

Measurability and accountability were the key themes of Landi's talk, specifically in the context of the many mistakes he said Apple made in the past few years, including poor product focus and forecasting shortfalls. Landi placed most of the blame on the old structure's confusing lines of command, which didn't give product managers the wherewithal to make decisions quickly.



Chief Operating Officer Landi: "glory is in profit."

He said Apple had "restructured the business units [so they] have all of the functions they need to make quick decisions." The new structure will also help Apple evaluate its return on investment for the R&D, production and mar-

keting costs of new products.

Landi also reported that he and Amelio had dined with Microsoft Chairman Bill Gates. While he declined to give specifics of their discussions, he said Apple needed to work better with Microsoft. "We live in a world where your toughest competitor must be your best partner," Landi said.

— Rick LePage & David Morgenstern

# LATE NEWS

An update to Now Utilities includes Now Mail, a mini e-mail system that lets users transfer files to other Now Utilities users in the same zone on an AppleTalk network.

The update also includes a plug-in called Now Send For Help, which lets users automatically contact Now Software's technical support staff via e-mail.

Other features include a collection of bug fixes and performance enhancements as well as a shareware utility, Web Quick, which is a \$US49.95 Finder-menu bookmark tool that organises frequented URLs.

The updates are free, and are posted monthly to the company's Web site at at http://www.nowsoft.com







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#### SCANNERS

# **New colour flatbeds from Nikon**

Nikon has released two new colour flatbed scanners that it hopes will gain a foothold in the small-office market, the ScanTouch AX-110 and ScanTouch AX-210 (\$975 and \$1350 ex-tax, Maxwell Electronic Imaging, 02 390 0220, fax 02 390 0201).

Both scanners are bundled with Photoshop LE and Omni-Page LE for image manipulation and optical character recognition. Both capture 8-bits per channel in single-pass RGB. Both

are SCSI-2 compliant and they feature effective reading areas of 216 by 297mm.

The ScanTouch AX-110 can capture images at up to 300 by 600dpi, whilst the more expensive ScanTouch AX-210 captures images at up to 600 by 1200dpi.

- Steven Noble



Nikon, traditionally a manufacturer of high-end scanners, hopes to gain a foothold in the small-office market with the ScanTouch AX-110.

## **LATE NEWS**

Apple Remote Access has come up to speed with a software update and a new PCI-based MultiPort Server version.

ARA 2.1, a free upgrade to the client and the personal server, is more compatible with 28.8Kbps modems and ISDN connections running at up to 115.2Kbps.

The new version includes an expanded set of modem scripts, which are now organised in a folder inside the Extensions folder.

ARA MultiPort Server 2.1.1 PCI, handles up to six ports, including high-speed modems and ISDN connections. The NuBus version supports four ports and its ISDN connections run at up to 57.6Kbps.

#### INTERNET

# Java-based servers aplenty

Five Java-based Web servers have emerged on the Internet



recently, each seeking to deliver the promise of platform in dependence. Three of the servers javaHTTPD, Cascade, and Jigsaw

— are available now. Jeeves is due in pre-release form later this year, as is the final version of the single commercial offering, ExpressO.

Since these servers are written entirely in the Java language, they should run on any platform where a Java Virtual Machine is available, including the Mac OS. The servers can also be executed in a Mac-based Java development environment.

Jigsaw is the World Wide Web Consortium's new reference Web server. It was created as an easily extensible server platform for use in testing future enhancements to Web protocols. Jigsaw is delivered in compiled form and with its Java source code, so developers can modify it for specific tasks.

javaHTTPD is also offered in compiled- and source-code forms with limited documentation.

Cascade is available only in compiled form and has no documentation.

Jeeves was announced in May at Sun's JavaOne developers conference in San Francisco. It is being designed for free, noncommercial use and will support the latest server-side APIs for Java.

The server-side APIs, called servlets, will offer a standard way of extending servers with programs written in Java, much as CGIs (Common Gateway Interfaces) are used to extend platform-specific Web servers. However, developers who have worked with the Java servers so far said their promised advantage of platform neutrality is not always true.

For example, javaHTTPD and Cascade were both written for Unix and make assumptions about the underlying operating environment, directory structure and the Java interpreter present. These assumptions are not true on the Mac, and thus developers will have to makes changes to some of the code to get these servers to execute correctly on the Mac.

All of these servers suffer from poor performance, according to developers. Since Java is an interpreted language that does not run native on any given processor, it is inherently slower than a server written and compiled in C or C++.

Just-in-time (JIT) compilers should improve Java performance considerably; Symantec released the first Mac JIT in May. Many developers are working on enhancements to the Java runtime model, which are expected to further improve performance.

— Stephan Somogyi

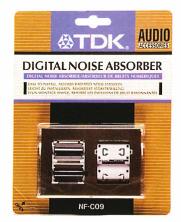
SERVER	AUTHOR/PUBLISHER	ADDRESS
Cascade	David Wilkinson	http://www.netlink.co.uk/users/cascade/
ExpressO	Innovative Desktop	http://www.capitalcity.com:4321/
javaHTTPD	Daniel Ockeloen	http://www.vpro.nl/interaktief/java/beta/httpd/sources.html
Jeeves	JavaSoft	http://www.javasoft.com
Jigsaw	World Wide Web Consortium	http://www.w3.org/pub/www/jigsaw/

MISCELLANY

# Throwing a blanket on digital noise

The circuits inside a personnel computer can switch on and off hundreds of thousands of times per second, emitting the pulse signals known as digital noise. The unfortunate result is static on the television and FM radio. The TDK Digital Noise Filter is a potential solution: it ferrite-bead filled body clamps around the AC power cord of your Mac, inhibiting the noise emitted from these lines and arresting radiated noise from other sources. The filter carries a recommended retail price of \$24.95.

- Steven Noble



The TDK NF-C09 Digital Noise Filter could end the conflict between your desire to play Myst and your household's desire to watch Blue Heelers.

CONFERENCE

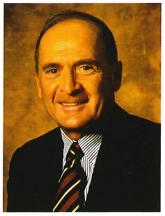
# Scalise to address Australian audience

George Scalise, Executive Vice President and Chief Administrative Officer of Apple Computer, will give the keynote speech at the Apple Technology Symposium. The Symposium, to be held at the Brisbane Convention Centre this August 16-18, is said to interest developers and end-users alike. Scalise's speech is expected to address Apple's business directions, including the company's commitment to licensing new technologies, product line simplification, and a new approach to the evolution of the Macintosh operating system.

The symposium is made up of three streams:

The Business stream will detail implications for business arising from new technology directions taken by Apple and the industry.

The Technology stream will focus on innovations in advanced technology and offer practical advice on their implementation and ongoing management.



Scalise has worked for Motorola in Europe, and is said to adopt the business-like approach favoured by Gli Amello.

The Developer stream will deliver the highlights from Apple's annual World Wide Developers Conference, with tools and techniques for taking advantage of technologies such as Mac OS 8, OpenDoc, CyberDog and QuickTime.

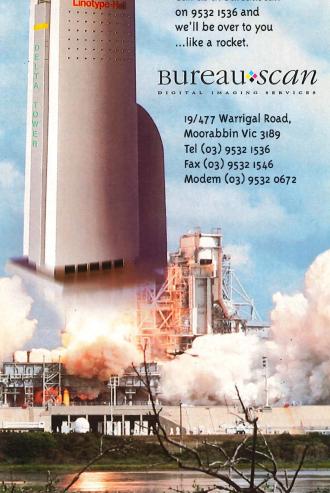
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- Steven Noble

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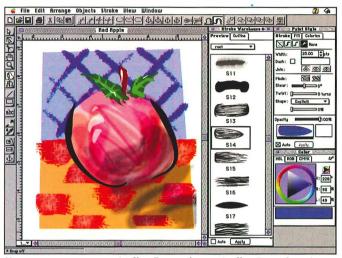


# Fractal application will cross vectors with natural media

After acquiring Ray Dream, Fractal Design did not miss a beat in updating the Ray Dream line of 3D illustration and animation software. Designer 4.1 and Studio 4.1 are free upgrades that support Apple's technology for 3D graphics acceleration, called QuickDraw 3D RAVE (Rendering Acceleration Virtual Engine), and QuickDraw 3D's 3DMF (3D metafile format). Fractal will add its own technology for interactive rendering of texture maps and lighting.

The update will feature new Internet components, such as a Virtual Reality Modeling Language export filter and support for GIF, transparent GIF and JPEG images. Visible motion paths for animation and additional levels of anti-aliasing will round out Version 4.1.

Fractal Design has also announced the first progeny to



Users can expect to see the first Expression — the first Fractal product to follow its acquisition of Ray Dream — later this year.

spring from its union with Ray Dream: a new breed of graphics application. The package — dubbed Expression — is expected to ship later this year. It will merge Fractal's natural-media technology with vector-

based drawing capabilities developed by Ray Dream. Fractal said Expression will let artists design fully editable graphics that have the natural characteristics of bit maps.

- Rebecca Gulick

# BUSINESS

# Apple tops multimedia sales, same-brand resales

Macs continue to be the world's best-selling multimedia com-



puter, according to a recent survey, but despite selling 67 per cent more multimedia machines than

in 1994, Apple still managed to lose market share in 1995.

According to a survey from Dataquest, 1995 was the third consecutive year Apple outsold its rivals. Apple shipped nearly 4 million multimedia computers, worth almost 19 per cent of the total market, and nearly a million more machines than its closest competitor, Packard Bell.

However, the worldwide market for multimedia computers — defined as sound- and video-capable machines with CD-ROM drives — more than doubled in 1995, exploding from 10 million units sold in 1994 to more than 20 million. In terms of market share, the survey said, Apple slipped from owning 22.9 per cent of the worldwide market to 18.8 per cent, losing 4.1 per cent.

Bruce Ryon of Dataquest said Apple continued to dominate because of its integrated multimedia architecture. "[Macs] were designed from the ground up to be multimediafriendly machines; [Intel-based] machines are still backing into it," he said.

Ryon predicted Apple may lose a little more market share in 1996 but will still dominate with about 15 per cent to 20 per cent.

Meanwhile, another survey has revealed that Mac users are the most loyal in the personal computing world. The report by Computer Intelligence InfoCorp found that 87 per cent of Mac owners who bought a new machine last year chose another Mac.

David Tremblay of CII said loyalty to Apple was based on the Mac OS rather than software-compatibility issues. But Tremblay added that software compatibility was the major reason Intel-standard PC users don't change to the Mac. "Once you've made a commitment to the Wintel world you're unlikely to switch, no matter how much you like the Mac."

— Leander Kahney

rate Sun's Java into its product line — cut into profits. Metrowerks said a move into new facilities also affected its earnings during the guarter.

**LATE NEWS** 

Metrowerks, maker of the

CodeWarrior programming

environment, reported a net

loss of \$US147,000 for its third

quarter, ended April 30. The

company said the loss occurred

in part because it did not have

a major product rollout during

For its latest third quarter, Metrowerks said it had rev-

enues of \$US2.4 million, up from revenues of \$US1.3 million in the corresponding 1995

The company said that

increased expenses in R&D -

including its push to incorpo-

the period.

period.

#### CD-ROM DRIVES

# NEC's new 8xCD-ROM drive

Putting a faster spin on its line of CD-ROM drives, NEC has announced it will join the ranks of vendors bringing 8x devices to Mac users.

The external MultiSpin 8Xe (\$857 RRP, NEC, 02 868 1811, fax 02 869 1112), due to ship in August, will offer a sustained data transfer rate of 1.2MB per second. The SCSI-2 drive achieves an average access time of 140 milliseconds, the company said. The drive will come standard with 256KB of cache memory, as well as a user manual and SCSI cable.

NEC said the device is compatible with Photo CD, CD-I, Enhanced CD and Video CD formats. The company said later models will comply with the Digital Video Disc standard.

- John Poultney



The 8Xe, NEC's new CD-ROM drive, is due to ship in August.

#### BUSINESS

# Apple hits home run

Home users wondering how they're going to upgrade their



original series Apple IIGS, or frustrated by random freezes and crashes on

their shiny new Power Mac, will be pleased by two new initiatives from Apple Australia.

Firstly, Apple Australia is offering a trade-in scheme for owners of older Macs or PCs. Anyone buying a Performa 5200 (Apple's new entry-level Power Mac) between July 15 and September 6 can get \$500 off its purchase price upon surrending Old Faithful. Macintosh marketing manager Bill Harrington explains: "It must be a working personal computer. It can be a Macintosh, a DOS machine, an Apple IIGS, or an Archives II for that matter - we really don't care, as long as it is working and it's not just a typewriter or calculator."

If the machine traded in is one of Apple's — a Macintosh, Lisa or original series — the customer can also get \$100 off the retail price of a Color Style-Writer 1500.

Secondly, Apple Australia is now selling a retail version of System 7.5.3, incorporating System 7.5.3 Revision 2, on CD-ROM. This important System update can boot any Macintosh right back to the Mac Plus, and is reported to bring a new degree of stability to certain Macs plagued by random crashes and freezes.

The CD-ROM also includes the Apple Internet Connection Kit, the LaserWriter 8.3.4 printer driver, MacLink Plus file translators, and a new CD-ROM driver that supports 8xCD-ROM drives.

This bundle will appeal to users without Internet access, or those who do not wish to spend hours online repeatedly trying to download the same piece of software. The CD-ROM carries a recommended retail price of \$149, and registered owners of System 7.5 can upgrade for \$74 by contacting Claris Software Upgrades (1800 028 316).

In the meantime, users who have System 7.5, 7.5.1 or 7.5.2 can upgrade to System 7.5.3 by purchasing the System 7.5 Update 2 and System 7.5.3 Revision 2 disk set through Apple Software Upgrades (1300 300 771) for \$30. Users who have System 7.1.x will need to purchase System 7.5 before upgrading to System 7.5.3.

- Steven Noble

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#### NETWORKING

# Apple sells servers without Mac OS

Apple Computer is already letting other companies sell computers that run the Mac OS. Now Apple is also manufacturing and distributing network servers that run other operating systems.

The Apple Network Servers,

announced earlier this year, were added to Apple's price list in July. The Apple-branded network servers run a version of AIX, IBM's implementation of Unix: Apple claims that these severs fit naturally into any multiplatform network environment.

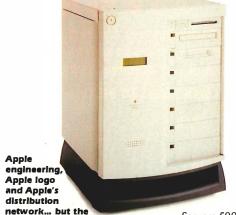
The Network Servers 500/132 (\$24,995 RRP, \$21,874 ex-tax) and 700/150 (\$34,995 RRP, \$21,874 ex-tax) are based on 604 PowerPC processors clocked at 132MHz and 150MHz respectively: both processors incorporate 32K of on-chip cache and integrated maths coprocessors. They ship with 512K and 1MB of Level-2 cache respectively; 32MB of error-detecting parity DRAM, expandable to 512MB though eight 168-pin DIMM slots; a 2GB or 4GB hard drive with space for six or eight additional internal hard disks; a quadspeed CD-ROM drive; a 4mm DAT drive; six PCI slots; and two built-in Fast/Wide SCSI-2 channels.

Apple has announced a support contract with Digital Equipment Corporation for the Network Servers. Each server will ship with one year, on-site, next-business-day, hardware and software support. Customers can purchase additional cover from Digital directly.

Apple Australia has also started distributing Motorola's Series E server products, which run Windows NT. Managing Director Steve Vamos, said the move is in support of Apple corporate customers who have Macintosh systems deployed on the desktop and are considering Windows NT servers for their enterprise networks.

The servers are available in four configurations: each based on a PowerPC 604 processor clocked at 100 or 133MHz. Each server ships with 16 or 32MB of RAM, at least 2.1GB of hard disk storage and a CD-ROM drive. List (ex-tax) prices range from \$11,049 to \$18,999.

— Steven Noble



new Apple Network Servers run AIX

rather than Apple's own Mac OS.

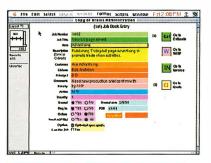


# CLARIS™

Martin Willing, Production Manager at Brains Design, comments: "FileMaker Pro is a key element in our business."

# The DATABASE REVOLUTION

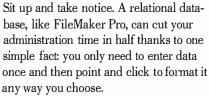
Spreadsheets were the wonder tools of the 1980s. Today relational databases can provide the same leaps in productivity for business.







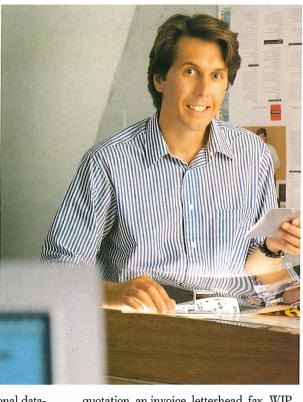
The power of a relational database like FileMaker Pro lies in its customisation. No matter what the nature of your business, you can set it up to handle your paperwork - and the best news is, there is absolutely no programming, just point and click.



Simple principal; enormous potential. Take Brains Studio for example, a Sydney Design group. Like many businesses they obtain quotes from suppliers, add costs, send quotes and invoices to clients, track their workload and expenses and pay suppliers.

Before using FileMaker Pro, they needed a whole suite of programs to run their business - desktop publishing, spreadsheet and word processors. They were also constantly re-keying details into each of these programs - such as client addresses, date, job number and so on.

With FileMaker Pro they were able to set up a relational database. Now they enter data once only. Each job has a unique number and can be viewed in several layouts ready to print - whether it's a



quotation, an invoice, letterhead, fax, WIP list - whatever. These items are laid out professionally to include the company logo. Because FileMaker Pro requires no programming, businesses can use it to set up complex databases from scratch or by adapting one of more than 40 templates included with the program.

Another FileMaker Pro user is David Pincent, Manager at the Film Vault. His company stores film and tape for advertising agencies and film producers - up to 150,000 different items at a time. They use FileMaker Pro to track it all and when they need to locate it, they can search on different criteria - title, job number, packaging, type of media etc. FileMaker Pro is used to invoice clients whose addresses are also stored in the program. David also downloads his invoicing information from FileMaker Pro into MYOB making it accessible to his accountant. He comments: "FileMaker Pro has a wide variety of templates to adapt for your business needs, making it easy to set up and learn."



### TRY IT FOR FREE

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Call Claris on (02) 452 8585 or fax (02) 9975 6083 for your free demo CD. To buy or upgrade, call Claris Upgrades on 1800 028 316 or contact your local Claris Authorised dealer. Competitor product crossgrade only \$129.

#### COMMUNICATIONS

# Front Office opens up telephony market

When we last discussed computer-telephony integration (Australian MacUser, February 1996, page 60), we bemoaned the shortage of locally distributed solutions for the Macintosh. Now Front Office (\$499)

RRP, Trio Technology, 07 5577 4411, fax 07 5577 4455) has reached Australian shores, and it works with Apple's GeoPort Telecom Adaptor pod or supported US Robotics Voice Modems.

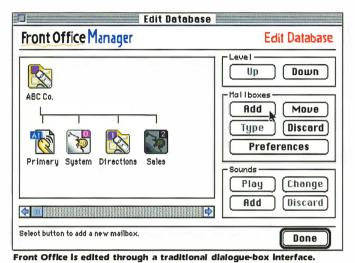
Front Office routes incoming telephone calls and can automatically page you in response to priority messages. It can function as a digital answering machine, supporting multiple voice mail boxes, greetings and menu levels. Messages can be retrieved from any Macintosh on the network, or by dialling into the system.

With Front Office, clients can order fax documents automatically. They dial in to Front Office then, using their touch tone phone, order documents such as product literature, order forms and price lists. They then key in their fax number and Front Office gets the selected documents and faxes them back automatically on the same line, or via a 4-Sight network fax.

The other products that offer automatic fax-back along with more traditional telephony functions tend to be fully-fledged development environments. Front Office, on the other hand, is an out-of-the-box solution that you customise through a traditional dialogue-box interface.

In related news, STF Technologies has acquired Pleiades Research, saying it would continue selling Pleiades' Front Office, as well as integrating its technology into STF products. The company plans to release an integrated package with voice, fax and data capabilities.

— Steven Noble

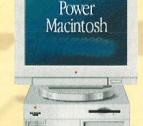






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DESKTOP PUBLISHING

# ScanPrepPro to get colour tools

ImageXpress is honing the capabilities of ScanPrepPro with a major revision to this scan-optimisation plug-in for Adobe Photoshop. The upgrade will add a welter of new features that improve the product's colour-handling and preview capabilities. In Australia, the new version is distributed by Apple (\$995 RRP, 02 452 8000, fax 02 452 8160).

During a scan, the new ver-

sion will let

users choose

specific

colour-correc-

tion tools

within Photo-

shop, such as

colour bal-

ance, curves,

levels, hue, saturation or

selective



The central dialogue box in ScanPrepPro lets the user define the media for acquisition and output.

colour. By tagging scans as RGB Archive files, users of Version 3.0 will be able to optimise a raw scan on the fly without specifying final resolution, tonal range or file type.

Version 3.0 will switch automatically to a CMYK preview mode when a scan is going to be used for colour separations, and users will be able to specify highlights and shadow as well as dot gain for individual CMYK colours. It will also offer enhanced control of high-key halftones and separations.

ScanPrepPro 3.0 will perform all colour processing in CIELAB colour space before converting an image to CMYK, according to ImageXpress. Users will also be able to create custom settings for separations and range-gain combinations

ethernet & SCSI features with true dual processing. The OM PC Card

and display them within the ScanPrepPro menu for easy access.

The software will include a new view that will let users adjust light or dark images. The software will offer an accurate preview of dot gain while maintaining the correct dot structure for the printing press.

It will feature three new descreening settings optimised for brochures, magazines and newspapers, ImageXpress said. In addition, users of Version 3.0 will be able to specify the number of lines per inch numerically.

Users will be able to ghost images for type overprint and specify output for the Internet. The new version will support most 35mm digital cameras, ImageXpress said.

- Matthew Rothenberg

Dealer Enquiries Welcome



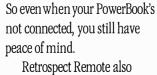
is the serious cross-platform solution.

# What was on your PowerBook?

Amazing where you'll find PowerBooks these days. On the road. In the air. At the beach. Everywhere.

Only thing is, they're travelling around with important files that don't exist anywhere else. And every disaster that can happen to a Mac in the office is multiplied when you take a PowerBook into the world. Like cocktails in the keyboard. Or when it gets hijacked at the airport. Voltage spikes. Neanderthal porters. The unfortunate farewell when you leave it behind in a taxi.

With Retrospect Remote<sup>®</sup> 3.0, PowerBooks get the protection they need. It backs up PowerBooks automatically when they connect to the network.



Retrospect Remote also backs up each Mac on your network in priority order.

And now, with the new Remote Pack for Windows 95 & NT, it takes care of PC notebooks and laptops. Even PCs that stay put.

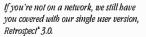
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MacWeek says
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best of the breed."
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the competition in
the dust." And
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its breadth or
detth."







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#### SYSTEM SOFTWARE

# QuickTime Numbers Game Continues

What's in a name — or, in this case, a number? Apple apparently decided that QuickTime 2.2 wasn't a sufficiently exciting enumeration for its latest and greatest QuickTime upgrade. A few more features in addition to

beefed-up MPEG and Motion JPEG (M-JPEG) support have boosted Quick-Time 2.2 a full threetenths of a version point, to QuickTime 2.5. The digital-video

The digital-video heavyweights Adobe Systems, Avid Technology, Data Translation, Radius, and Truevision have teamed up with Apple to forge a QuickTime 2.5 M-IPEG video-file

format that will let you capture video on one brand of video card and play it back using a different brand. Also under development are such improvements as MIDI enhancements and multiprocessor support.

QuickTime 2.5 can play back MIDI files that use 16-bit instrument samples and let users add plug-in MIDI-instrument libraries from third parties such as Yamaha and Invision. And, on multiprocessor systems QuickTime will be able to divvy up compression and playback processing among processors a second processor can as much as double decompression speed. Developers will also be able to place QuickDraw 3D objects into tracks, just as is done now with text and sprites.

Soon after QuickTime 2.5 comes out, expect further

improvements. For example, Apple will enable QuickTime playback of MPEG movies at 640 by 480 pixels and at 15 frames per second with near-CD-quality sound on most Power PC-based Macs — without the need for MPEG-acceleration hardware.

In the near future, MPEG will become an integrated component of QuickTime, so for example, you'll be able to cut, copy, and paste video frames between MPEG and QuickTime source files.

QuickTime 2.5 should be available by the time you read this. Apple will make it obtainable free of charge on services such CompuServe as well as on Apple's QuickTime Web site, at http://quicktime.apple.com/

— Sean I Safreed



# New Entertainment Releases

# MARATHON INFINITY + Carnage Forever +

Marathon Infinity gives Marathon players everything they need to continue playing in the Marathon world indefinitely. This standalone product is based on the Marathon 2 world, and features:

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A new adventure, new network levels and new physics models giving players more freedom of movement than ever before.

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Mapmakers can walk through their blank levels, painting textures on surfaces at will, and a point-and-click lightsource tool. Also included will be a Physics Editor and Shape and Sound Installers

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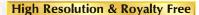


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PRINTERS

# Apple ships 12ppm laser

Apple has delivered a new network laser printer that features a duplexing option.

While most current Apple printers draw on Canon engines, the LaserWriter 12/640 PS (From \$3195 RRP, Apple, 02 452 8000, fax 02 452 8160) is based on a Fuji Xerox mechanism. The new printer can output 12 legal-size pages per minute at 600-by-

600dpi, the same resolution as its predecessor, the LaserWriter 360. The optional duplex module carries a recommended retail price of \$695.

The new model includes Adobe PostScript Level 2 as well as HP PCL 5. It ships with a 30MHz AMD 29040 RISC chip and 4MB of RAM, which can be expanded to 72MB.

The 12/640 PS features Ethernet, LocalTalk and bidirectional

parallel interfaces. It supports EtherTalk, IPX and TCP/IP protocols.

The printer comes with a 250-sheet feeder and an 80-sheet multipurpose cassette. Options include a \$695 RRP 500-sheet cassette; a \$250 RRP envelope cassette; and a \$75 RRP output tray for special media, such as transparencies or postcards.

- Leander Kahney

Apple's new LaserWriter 640 supports duplexing — automatic printing on both sides of a page — in certain configurations.

#### DIGITAL CAMERAS

# Imported camera back works with studio cameras

The Phase One StudioKit Plus is a digital camera back imported by Multicomm Australia (03 9500 9907, fax 9500 9922). It usually carries a list price of less than \$19,000, depending on exchange rates.

The back fits onto any fourby-five-inch view camera, and captures images at up to 3600by-2500 pixels and 12-bits per channel (RGB). According to Multicomm, the bundled software — Agfa ColorTag and ten Agfa ColorLinks — can perform unsharp masking and RGB-toCMYK conversions on-the-fly. The software works on any Power Mac or 68040-based Mac with 24MB of RAM.

The camera back is bundled with two tungsten softbox lights.

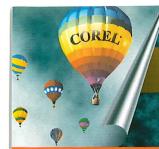
The camera back's light sensitivity is equivalent to ASA 800 and supports 25-second full-colour previews. It incorporates flash RAM — Phase One's flicker suppression technology — and Macintosh or PC connectivity.

— Steven Noble



The Phase One StudloKit Plus fits onto the back of any four-by-five view camera. It comes with two tungsten softbox lights.





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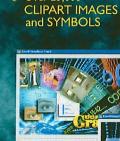
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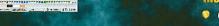






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#### MAC OS-COMPATIBLES

# IBM prototype runs WindowNT, Mac OS

PC Expo in New York attendees were offered proof that the forth-



coming PowerPC Platform (PPCP) is not all smoke and mirrors. In a booth UPDATE co-sponsored by the

PowerPC partners - Apple, IBM and Motorola - a prototype hardware system was demonstrated running both Mac OS and Windows NT.

Based on an IBM prototype, code-named Moccasin, the system ran a 133MHz PowerPC 604 processor.

It used an Intel-standard PC keyboard and two-button

At start-up, users are presented with a choice of operating systems as well as configuration options, such as adding another operating system (OS) to the mix.

The demonstration ran an unreleased version of System 7.5.3 that has been altered to work on PPCP machines. The demonstration featured several Mac applications, including Claris FileMaker Pro and Adobe Photoshop.

IBM also showed Long Trail. its first-generation PPCP licensing design. The final version of the logic board will be available in late August, the company said.

IBM and Motorola said the PPCP version of the Mac OS is expected to arrive at the same time as complete systems: by the end of 1996 or early in the first quarter of 1997.

The Long Trail system shown offered both PC and Mac input/ouput (I/O) systems, unlike previous prototype boards that had the Mac I/O on a separate add-in card.

Ryan said clone vendors expected most users to run the Mac OS, so it was more costeffective to put ADB and Fast SCSI-2 ports on the logic board.

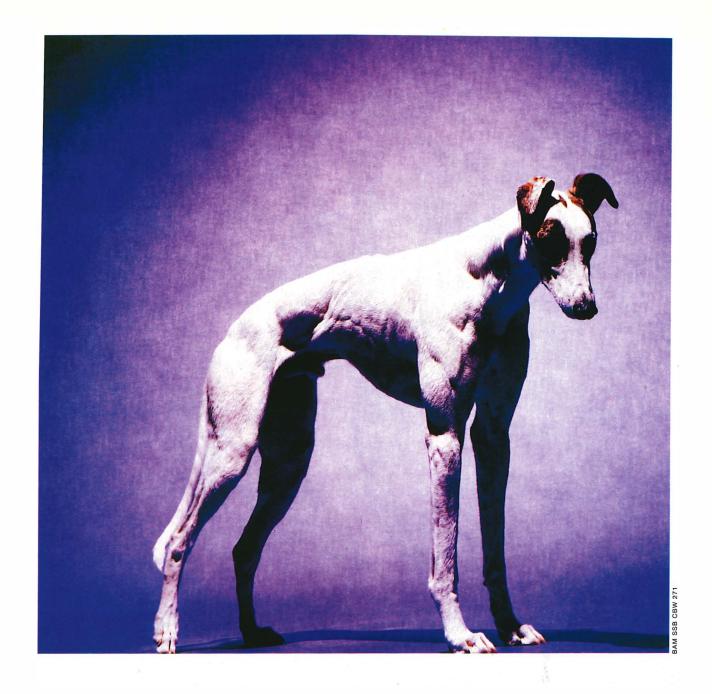
Mark Ireland, hardware products program manager with IBM Microelectronics, said most clone vendors will differentiate systems with various combinations of Mac and PC I/Os.

For example, manufacturers could add chips to the logic board to support Universal Serial Bus or FireWire peripherals.

Mac-capable PPCP systems will require an ISA-to-PCI bridge chip to link an internal Enhanced-IDE (Integrated Drive Electronics) hard drive, PC-style ROM BIOS, keyboard and mouse. However, Mac-only systems will not need an actual ISA slot, Ireland said.

— David Morgenstern





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# QuickClicks

# Color QuickCam

DIGITAL 'EYEBALL' CAMERA FOCUSES ON COLOUR

QuickCam is virtually identical to its black-and-white cousin. The most telling difference is a notched collar surrounding the colour version's lens, for adjusting focus. Also, because it requires more electric power than the Mac's serial port can supply, the Color QuickCam has connectors for both the ADB and the serial ports. The ADB connector has a passthrough, so you can hook up additional ADB peripherals.

Inside the QuickCam is a charge-coupled device (CCD) that captures images at up to millions of colours at a 640-by-480-pixel resolution and a chip that delivers Connectix's new proprietary video compression format, VIDEC (Video Digitally Enhanced Compression). VIDEC enables the Color QuickCam to deliver frame rates comparable to the original's, despite the need to process three times as much data with colour.

The built-in microphone was scrapped to make room for the VIDEC chip. You can employ any Mac-compatible microphone instead although we couldn't find the word 'microphone' in the Color QuickCam manual.

The Color QuickCam comes bundled with programs for creating videos and capturing still images. New features include AutoCapture; which enables you to take shots at any interval you choose; and an automatic timer that snaps a picture after any delay you specify.

The colour camera's controls govern brightness, white level, hue, saturation, black level, and sharpness. The least sharp setting, which Connectix recommends for videoconferencing, gives you smooth video by sacrificing the number of pixels captured in each frame. We were hard-pressed to improve on the camera's Auto Hue and Auto Brightness settings in normal indoor room lighting.

We wished the Color Quick-Cam's new focusing ring had been more responsive. Twisting the ring to widen the focus sometimes seemed to have no effect on-screen, and it turned so easily it offered little feedback. Conversely, when we were tightening the focus, the knob offered so much resistance that we needed two hands to twist the ring — and twice snapped it off. It snapped right back on, but we were left with a distinct impression of cheesiness.

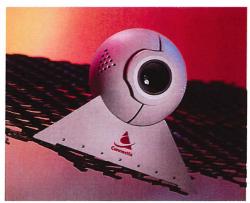
Despite many improvements over the camera's black-and-white predecessor, the camera's professional uses should be limited to occasional still shots for presentations or 'rough draft' video prototypes. Or you can use it just for fun.

Туре:	Imaging
	device
Rating:	\$ \$ \$ 1/2
RRP:	\$579
Distributor:	Firmware
	Design
Telephone:	047 217 211
Facsimile:	047 217 215
Reviewer:	Nancy

### **RATING KEY**

Outstanding	*
Very Good	* * * *
Acceptable	<b>444</b>
Poor	<b>♦ ♦</b>
Seriously Flawed	•
Dangerous	•

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products, evaluated
by experienced users.
We sort out the musthaves and the mustbe-avoideds. Detailed
product reviews are
on page 79.



Peterson

You can tell the Color QuickCam from its black-andwhite cousin by its lens-adjustment ring, or collar.

# WebArranger 2.0

REVAMPED ORGANISER BRINGS ORDER TO THE WEB

inding what you want on the World Wide Web is often challenging enough, but it can be a more formidable task keeping track of where you've been, what you've found along the way, and the sites you want to revisit. Just as newer search engines are making it easier to find Web sites relevant to your interests, so it is that new applications and utilities can help you make more productive use of your time online.

If you're concerned about keeping on top of the information and resources you find on the Internet, CE Software has released a comprehensive all-inone solution whose scope surpasses anything else currently on the market. WebArranger is a personal information manager (purchased from Common Knowledge, who sold it as Arrange) which has been revamped and turned into an integrated application for professional Internet users.



A WebArranger page can include several kinds of notes, including a URL address, To Do, contact address and reminder.

WebArranger combines a scheduler and organiser database with a superior selection of Internet tools. One feature — FTP Download — automatically continues to try and download the files you want from an ftp site until it is successful, while another — URL Validator — will monitor Web addresses to make sure they are still valid.

WebArranger is bundled with several applications, extensions and utilities: WebWhacker can save entire Web sites to your hard drive, so that you can check them off-line. It modifies the HTML files so that they point to the files on your hard disk, not out on the Web. Internet Config lets you designate which applications should be used when you're online and lets savvy applications share Internet preferences. The Grabber automatically captures Web page graph-

ics and data, whether or not WebArranger is running. It files them as notes or clippings in WebArranger's Contents section, a hierarchical filing cabinet with folders that can include several topics and various types of notes: a URL (Uniform Resource Locator) address, for instance, a To Do, photo, graphic, or contact address. ICeTEe lets you highlight a Web address, press Command-R; and launch a Web browser to take you directly to the specified URL. Turn on WebArranger's WWW Foot

Steps feature if you want to log the URLs of all the sites you visit.

WebArranger offers considerable flexibility and functionality for anyone wanting to map out their favourite parts of the Web, but its complexity is likely to intimidate all but hardcore Web users. For those with simpler needs, shareware and freeware alternatives such as Book-Mark Manager (http://www.walrus.com/~noyo/) and Clay Basket (http://www.hotwired.com/staff/userland/yabaabb) can make charting the Internet a more rewarding experience.

Туре:	Information
	manager
Rating:	\$ \$ 1/2
RRP:	\$149
Distributor:	Conexus
Telephone:	02 9975 2799
Facsimile:	02 9975 2966
Reviewer:	Jeremy Templer

# Now Up-to-Date/Contact 3.6

CONTACT MANAGER NOW LINKED TO THE WEB

ow Software is keeping a tight grip on its leadership in the Mac personal information manager market with the release of Version 3.6 of its network calendar Now Up-to-Date and contact manager Now Contact.

The bundle comes in two flavours: a Web Publisher version and a cheaper client sideonly version. Both let the calendar and contact programs connect to servers via TCP/IP — the 'language' of the Internet - and attach URLs (Uniform Resource Locators) to events and contacts. However, the Web Publisher version also lets users post public items on the Web to be viewed with browsers that support tables, and utilitised by owners of either version of Now Up-to-Date/Contact 3.6.

Buttons in both programs let you display attached URLs within Netscape Navigator. In addition, Now Contact recognises e-mail addresses by providing a button that will launch



Now Up-to-Date and Now Contact are now sold as a single product: eventually, the Contact moniker will be dropped from the title.

Navigator's Message Composition window. E-mail addresses in files created by previous versions of Now Contact are recognised in the new version.

We'd like to see the Now duo take advantage of Peter Lewis' Internet Config. Also, Now repeated a mistake it previously corrected in Now Contact: It left no visual indication that a calendar item has attached contacts, files or URLs.

With Web Publisher, users can serve Web pages either as HTML files via a Web server or directly from a calendar or contact server. They can also drag back the data from such pages into Up-to-Date or Contact via Versit's Virtual Business Card (vCard) specification. While there is no way to add data via a browser, a forthcoming Naviga-

tor plug-in should remedy that and circumvent the clumsy navigation imposed by HTML.

Now has done an outstanding job of making its PIM data easily accessible to the Web whilst letting its Mac clients incorporate Web data. It has transformed a cumbersome Web publishing task into a transparent extension of its products.

Туре:	Personal
-	Information
	Manager
Rating:	***
RRP:	\$179, or \$599
	Web Publisher
Distributor:	Trio
	Technology
Telephone:	07 5577 4411
Facsimile:	07 5577 4455
Reviewer:	Ross Scott Rubin

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# **Bryce 2**

DELIGHTFUL TOOL FOR ILLUSTRATORS AND EXPLORERS

sing Bryce, the talented illustrator can generate, onscreen, the landscapes of his or her own imagination and, thanks to the new render-to-disk-in-thebackground feature, quickly move on to less processor-intensive tasks. The resulting images can be saved as high-resolution (up to 32,000 by 32,000 pixels) 2D files for manipulation in packages such as Photoshop or XPress; as panoramas for stitching together using Apple's Quick-Time VR authoring suite; or as Bryce files for further manipulation by the author or other Bryce owners. Bryce can also import PICT, DXF or 3DMF files.

Bryce's interface is a delight to work with, encouraging instant exploration. Apple's menu bar remains hidden unless the cursor strays in its direction, whilst pictorial button bars obscure the Desktop unless the user deliberately chooses a traditional Macintosh interface. These buttons are designed to be expressive yet unintrusive — as the cursor moves within clicking



Bryce usually hides the Finder with its own distinctive interface. This landscape is the work of Eric Wenger, who created the original Bryce in his free time.

distance of a particular button it is subtly highlighted and a few words appear explaining its purpose in further detail.

Bryce does not try to compete with full-blown 3D modelling and rendering applications. It does one thing — create landscapes — and it does it very well. Mountains, rivers, fog and cliffs can all be randomly generated, mouse- or tablet-drawn, or

constructed from imported data. Landscapes can be completely realistic or, now that Kai Krause has relented to demands for support for multiple suns and other unnatural objects, utterly fantastic. On-screen redraws are nearly instantaneous, on-screen rendering takes a few minutes, and rendering at high-resolution for commercial output has been known to take days.

Whilst anyone could find Bryce a delight, professional illustrators - if rendered landscapes are a recurring feature of their work— will be more able to justify the three-figure price tag. Such users are more likely to own the kind of machines that will bring the best out of Bryce: it can make do with a 68040based Mac with 8MB of free RAM, but the benefits of more memory and a faster processor are manifold. These users will also appreciate the 300-page manual that is shipping with the current updater, whilst dabblers may find the original Explorer Guide an inviting alternative.

Туре:	Graphics &
	Publishing
Rating:	* * * *
RRP:	\$289
<b>Distributor:</b>	Mitsui
	Computer
Telephone:	02 9935 2400
Facsimile:	02 9935 2500
Reviewer:	Steven Noble

# PB Bear's Birthday Party

ADORABLE TEDDY BEAR INTRODUCES READING SKILLS

B Bear, with his fluffy ears and big brown eyes, is irresistible. He's one of those old fashioned teddies with arms and legs that move. P is for pyjamas, his favourite clothes, and B is for bed, his favourite place.

PB is the star of this interactive book for preschoolers which is all about the excitement of PB's Birthday. He gets a few cards, a present and a cake, then goes on a picnic with his well-worn toy friends.

There's some text on each page which is read aloud to the child. Pre-readers will start to see the close link between written words and spoken words when they use this program. Many words are replaced with small

pictures, so a sentence is a combination of pictures and words. It's pretty obvious to the children that those letters all

dren that those letters all mean something.

Because this is an English program, we hear the story read in 'proper' English and the spelling is appropriate for an Australian audience. The toys get in on the act and read a few pages to us for a bit of variety. We listened to whole pages and then lines at a time. I'd also like to

see the option to hear one word at a time — a feature of most other interactive books.

In addition to PB's story there are a couple of activities, all very simple and suitable for preschoolers. Ten small games cover concepts such as colours, numbers and shapes:

you can click on the balloons, work your way through a tiny maze or

build a little train.

PB Bear, the cutest teddy bear, introduces preschoolers to a few new skills.

Sometimes it feels like these activities should do a little more, but they suit young children with a very short attention span.

This is a great program to introduce young children to the computer. PB helps children relate to reading in a natural way and introduces a few other skills as well.

Туре:	Education
Rating:	****
RRP:	\$59.95
Distributor:	Roadshow New Media
Telephone:	02 552 8700
Facsimile:	02 660 8436
Reviewer:	Anne Glover

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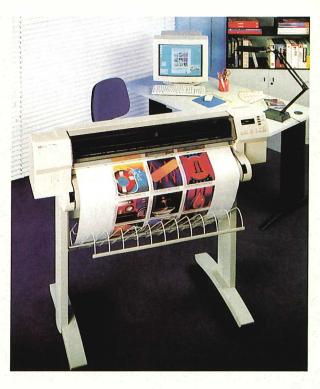
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cs - 16/750, dual scan colour	\$4995
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# window to the b

Today, netscape navigator is most people's preferred window to the web,

by Jason snell



but Microsoft's Internet Explorer is mounting a challenge to the throne and Apple's cyberdog could supersede browsers altogether by letting us embed Internet links into documents.

or the first time, Navigator has some real competition: Microsoft's Internet Explorer 2.0 for the Macintosh, a speedy and compatible Web browser with a feature set that matches — and sometimes exceeds — Navigator's. Meanwhile, a bevy of other browsers are trying to make up lost ground, and Apple's Cyberdog is an alternative to Web browsers altogether.

Everyone has a choice — even subscribers to CompuServe, who later this year will be able to use either browser. Navigator and Explorer are freely downloadable from the Internet, so you can try them both out yourself — but in the end, you'll have to pick one of them to be your main surfboard.

Which should you choose? The groundbreaking standard-setter or the upstart challenger from the megacompany Macintosh users love to hate? And does it really matter? After all, isn't a browser just a window onto the Web that simply displays the creations of Web-page designers?

You bet it matters. The Web is still in its frontier phase, with millions of designers developing new tricks and techniques daily. You need a browser that can handle anything the Web throws at it today and that'll be ready for whatever appears tomorrow. Luckily for you, Netscape and Microsoft are each firmly committed to winning the battle of the browsers — and both have deep enough pockets to fund their armies of developers.

What does a browser need to do to win the war? Let's take a look at the combatants.

#### HTML — beyond the basics

In order to compare Web browsers, you need to understand how they work. When a Web page is sent over the Internet, it's all plain text — there are no bold or italic characters, no fonts or point sizes, not even any graphics. Instead, the plain text uses a system called HTML, HyperText Markup Language, which describes styled, graphics-rich pages by using special codes called tags. When a browser receives an HTML file, it interprets the tags and draws the page onscreen, calling on image files as needed.



Because HTML was originally designed to describe pages only in general terms (*This is a big headline*, rather than *This is a 48-point headline in Times Bold*), the same page might be displayed in wildly varying ways — depending on the Web browser used to view the HTML code.

One of the reasons Navigator became the leading Web browser was its development of and support for new HTML tags: for centring text, adding background colours and patterns, and aligning text and graphics within tables. Because Netscape stayed a step ahead in implementing new tags, Navigator offered a richer environment for Web site designers. That sites were then designed specifically for viewing with Navigator is no surprise — HTML is a very limited design protocol, and frustrated Web designers naturally latched onto every extra feature that could be wrung out of it. Because other Web browsers could not use the Navigator tags, Web pages that had been designed to use Navigator's tags - lots of Web pages looked good only in Navigator, and before long, 90 per cent of the Web was designed for Navigator.

Rival browser makers have been playing catchup (see *The also-rans*), and Netscape has kept several steps ahead of them by adding even more and more-powerful — features to Navigator. But in just a few months, Microsoft has managed to leapfrog other rivals and now provides a real alternative to Navigator.

Internet Explorer supports almost every feature offered by Navigator. It has to — why would anyone switch from Navigator and lose access to all the graphically pleasing HTML tags Netscape has introduced? Navigator and Explorer each support the most popular of the 'extended' HTML features, most of which were introduced or popularised by Netscape: background patterns and colours, coloured text, typesize controls, tables, and horizontal and vertical positioning of graphics.

However, Microsoft hasn't merely replicated Navigator's tags — it's one-upped Netscape by introducing a host of additional HTML tags that let designers set text in various typefaces, for example, or have a background sound play while a page is being loaded.



Most browsers simply ignore HTML tags they don't understand. If a Web-page designer uses tags supported by only one browser, other browsers will ignore them. Although this may sound distressing, Microsoft turns it into a virtue. Designers can add Explorer-specific tags to their pages without fear of turning away the legion of Navigator users on the Web — Navigator users may not even know they're missing anything.

For example, rather than creating an entirely new tag for inserting QuickTime movies into Web pages, Microsoft enhanced the existing HTML tag for placing still images. As a result, you can design a page that will show a QuickTime or AVI movie when viewed in Internet Explorer and that will substitute a GIF or JPEG still image when viewed by browsers that don't support Microsoft's new tag.

In contrast, many Web pages that rely on Netscape-specific tags can be unreadable or extremely unattractive when viewed by other Web browsers. For example, although Navigator was one of the first browsers to support the display of images using the high-quality JPEG format — rather than the old, fat, grainy GIF format — Navigator doesn't provide Web designers a way to send JPEG files to those browsers that can view such images and GIF files to those that can't. Therefore, page designers have to use either JPEG images exclusively — thus limiting their pages to Navigator users only — or GIF images exclusively. These days, most browsers support JPEG images, but there's always another 'only in Netscape' feature just around the corner.

Because Web pages can be rendered in wildly varying ways, depending on the Web browser being used, it's important to note that Explorer is remarkably good at displaying pages exactly as Navigator — the de facto standard — would display them. When we used Explorer to view a complex test page designed for Navigator and laden with graphics, tables, and interactive forms, it looked nearly identical to the same page as viewed by Navigator — absolutely identical in most details.

#### Walking the cyberdog/an opennoc-internet cross









Using a Web browser isn't the only way to surf the Internet, as Apple is showing with Cyberdog, an OpenDoc-based Internet application that barks up quite a different tree.

Both Navigator and Explorer approach the Web from a similar vantage point. When it's time to surf, you launch a browser application and get to work. The problem with this approach is that other Internet functions, such as e-mail, newsgroup access, and ftp file transfers, get tucked in around the edges of the browser's central function. In fact, many people use a separate application for each of these functions.

Rather than being yet another monolithic browser application, Cyberdog is a collection of *OpenDoc parts*, small chunks of application code, each of which serves a particular Internet-related function. Apple has created an allin-one Internet application users can customise, or even use pieces of in other OpenDoc-compliant software.

#### Greater than the sum of its parts

The OpenDoc parts that comprise Cyberdog are called CyberButtons. They are embedded in what is known in OpenDoc parlance as a container document. This is the beauty of Cyberdog: You no longer have to use specialised applications to access the Web, download a file, or send e-mail; instead, you can embed a link to the Internet in any OpenDoc-savvy document. Claris has announced that the next version of ClarisWorks will be able to generate such documents, whilst Apple intends to make the Finder itself an OpenDoc container document with Gershwin (the version of the Mac OS to follow Mac OS 8).

Each CyberButton has associated with it a *CyberItem* (that defines its behaviour) and a graphic. For some buttons, such as Starting Point's Explore and Search buttons, the CyberItem is a URL — clicking on one of these

buttons opens a browser window that connects to a corresponding Internet site. Clicking on other buttons, such as Starting Point's Log and Notebook buttons, invokes special functions.

#### Dogging your trail

The Log, for example, lists Cyberltems for the last 100 Web pages, ftp sites, and newsgroups you've visited. It updates automatically and is smart enough not to display the same site multiple times.

Cyberdog's notebooks are similar to the Log, but whereas the Log updates automatically, following you like a digital bloodhound, notebooks contain only Cyberltems you've dragged into them. You can put as many Cyberltems as you like into a notebook, and you can group them into folders for easier cataloguing, although folders currently go only one level deep. You can also create multiple notebooks. Addresses you store in the default notebook are directly accessible from within e-mail and newsgroup message windows, relieving you of having to type lengthy and enigmatic Internet addresses.

#### Webbing the dog

When it comes to surfing the Web, Apple's Cyberdog is a mixed bag. The browser windows are HTML 2.0-compliant and support tables and backgrounds. They do not, however, support right-aligned text or client-side image maps; nor do they support Navigator plugs-ins or Java. These are serious shortcomings in a world in which the sizzle half-life of new Web features is measured in months.

Apple is aware of the need to catch up and is working with third-party developers to provide appropriate

The one notable HTML feature Navigator 2.0 provides that Explorer doesn't is frames. When a frames-based page is displayed in Navigator, Navigator can split the page into several scrollable panes and display multiple HTML documents at once. By using frames, a Web designer can, for example, create a hyperlinked table of contents that can remain open while pages referenced in that table of contents are viewed in a separate pane of the same browser window.

#### Multimedia — be ready for anything

Although HTML support has traditionally been the major issue in evaluating Web browsers, version 2.0 of Navigator introduced a new set of issues: how best to play multimedia content in-line — directly in the browser window. Although multimedia content could previously be displayed with external 'helper' applications, the plug-in architecture built into Navigator 2.0 allows the playing of just about any multimedia file format in the browser window, as long as an appropriate third-party plug-in has been installed.

The Volcano Coffee Company

Th

Internet Explorer / the upstart from microsoft

Explorer's large tool bar gives one-click access to news and mail, the Microsoft search page, Favorites, and settings. Other buttons increase and decrease font size; copy, cut, and paste; and display HTML source code.

This headline is in a typeface different from the body text's, thanks to Explorer's support for the font face HTML tag; a backup typeface can be specified if the first choice isn't installed on a user's system.

Explorer users see this coffee cup steam and spin, thanks to a linked AVI movie; users of other browsers will see a still image of the Hot Java logo.

Explorer's marquee tag lets authors place moving text on a Web page, which is about as annoying as Netscape's blink tag.

solutions. In fact, one developer, ResNova, of Berkeley, California, has already demonstrated a prototype Open-Doc part that can view Java applets, whilst Netscape has said it will develop an OpenDoc-compliant version of its popular Web browser, Navigator.

The Cyberdog approach to browsing does have some advantages. Other browsers require you to cut and paste — or type — URLs to change locations on the Web. Cyberdog simplifies this process. In the top left corner of every Cyberdog browser window, just above the URL listing, sits a Cyberltem that contains the link to the page in the window below. You can switch instantly to another Web page or to an ftp site or newsgroup by dragging the Cyberltem for that location over the Cyberltem already there. Want to save a reference to a page you've just surfed to? Drag its Cyberltem to your notebook or the desktop. Want to pass it on to a friend? Drag it to a floppy disk, or e-mail it. Big deal, you say? Navigator bookmarks can jump through most of the same hoops. Perhaps. But there's one hoop they can't jump through.

#### **Buried** bones

Although notebooks and the Log are time-savers and CyberButtons have a great deal of flexibility, there is an even more compelling aspect of Cyberdog that no browser can match: the ability to embed Internet sites directly within a document.

If you drag a Cyberltem for a Web page into an Open-Doc document, you don't get a button or icon that can take you to that site — you get a browser-like view of the site itself, live and in person. Same for an ftp site or newsgroup location. Close the document, and reopen it later. The sites update automatically. You can put as many of these live links into a document as you like.

#### Paper training for OpenDoc

For the moment, the Cyberdog vision far outstrips the reality. OpenDoc is still in its infancy, and Cyberdog has both the distinction and the burden of being its first real application. Although OpenDoc is supposed to elevate the Mac's ease of use to new heights, it's equally likely to cause a good deal of confusion in the interim.

even if the graphic's size isn't known or the graphic is part

of a table, so pages are readable sooner than in Navigator.

Furthermore, Cyberdog/OpenDoc is a total memory hog. Just launching OpenDoc and opening the Cyberdog Starting Point document causes the system to swallow over 5MB of RAM. Did someone say something about component software being small and lightweight?

Neither OpenDoc nor Cyberdog is widely available. Apple probably won't make it commercially available until later in the year, when enough other OpenDoc parts and containers are available to create a viable working environment.

Still, Cyberdog is intended to be 'exampleware'. Apple's not trying to compete with Netscape or Microsoft for dominance in the browser market. Quite the contrary: Apple is encouraging third parties to develop more-powerful alternatives to its Cyberdog parts, including parts that will support VRML and QuickDraw 3D.

Apple has chosen wisely in making Cyberdog the centrepiece of its reinvigorated OpenDoc strategy. With Cyberdog, the company has found a way to take some leadership in what is arguably the hottest market in the computer industry today — not by jumping in two years too late with another Apple me-too product but by developing as core OS technology a whole new approach to cybersurfing.

OpenDoc could be the biggest system-software sleeper Apple has had in years.

— Henry Bortman







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Since the world of Navigator-compatible plug-ins is so new, the future of the technology is hard to predict. Major plug-ins such as Adobe's PDF - for highquality page rendering - and Macromedia's Shockwave — for animation and increased interactivity — will probably become popular, and no doubt some of the many new plug-ins on the market will also become de facto standards. If a Web browser is to compete with Navigator, it must support in-line display of PDF documents, Shockwave presentations, QuickTime movies, and more — to do so, it must support the appropriate plug-ins.

Explorer is the first browser other than Navigator to support Netscape's plug-in architecture. Although the plug-in technology is still shaky - even Navigator doesn't run all plug-ins successfully all the time -Explorer works with most of the common plug-ins, including those from Adobe and Macromedia. As a result, just about every multimedia format in use on the Web can be played in Explorer as well as Navigator.

Explorer also supports some multimedia formats without needing plug-ins: it can play sounds in the common WAV, AIFF, MIDI, and Sun μ-law formats as well as movies in either the AVI or the QuickTime format - users of Explorer don't necessarily have to download and configure helper applications just to view a teaser of a forthcoming episode of Babylon 5.

Explorer offers rudimentary support for Virtual Reality Modeling Language (VRML) via Apple's QuickDraw 3D technology. Explorer's VRML browser doesn't support all advanced VRML features, and it's not easy to navigate a 3D world by using the QuickDraw 3D interface, but Explorer provides the Mac's first useable, stable VRML browser. Netscape Navigator 3.0 offers Live 3D — a VRML viewer component also somewhat shakey in the beta version of Navigator 3.0 that is available at writing.

Neither Explorer nor Navigator yet supports Java, the much hyped cross-platform language that allows small programs called applets to be embedded in Web pages and executed within the browser window. However, Navigator — unlike Explorer — currently supports a simplified subset of Java, known as JavaScript, which allows simple scripts to be embedded in Web pages.

Trying to be the only Internet-access application you'll ever need, Explorer and Navigator each also support e-mail and newsgroup access. However, you can only send — not receive — mail with Explorer. Using Navigator, you can send as well as receive mail, using the POP and SMTP protocols. Navigator's news reader is more advanced than Explorer's, which is rudimentary at best - but to be honest, neither program's e-mail and news features come even within hailing distance of adequacy. If you send and receive e-mail or read newsgroups on a regular basis, you'll be better off using free stand-alone tools such as Qualcomm's Eudora Light or John Norstad's NewsWatcher.

#### Speeding down the I-Way

When it comes to displaying pages, Explorer is faster. For example, when you click on Navigator's Back button, you usually experience a brief delay, fol-

#### Netscape Navigator/the old-time favourite



Navigator's main tool bar is smaller than Explorer's, but a second row of 'directory' buttons offers automatic links to several Netscape-maintained Web-resource pages.

This page takes advantage of Navigator's frames to divide itself into different panes, with a navigation frame at left that includes links to various topics. When you click on a link, its corresponding page is loaded in the large frame at the right.

The scroiling text in the bottom of the browser window is created by a script embedded in the Web page and written in JavaScript, a subset of Java.

If the browser is connected to a secure page, the key will appear whole. Navigator supports the SSL security protocol, as does Explorer.

#### The also-cans / too little too late

it's a tough sell when you're up against Navigator and Explorer. Four second-tier browsers are hanging on, however — although just barely.



MacWeb 1.1.1, from Tradewave, was the first good Mac Web browser — small and simple, not requiring much RAM or hard-disk space. Unfortunately, MacWeb is showing its age — it doesn't support background colours, tables, or just about any Netscape innovation. Hopefully, MacWeb 2.0 will offer some improvement, but for now, MacWeb is useful only if you're stuck with an underpowered Mac.



#### **NCSA Mosaic**

NCSA Mosaic 2.0.1 is the latest version of the browser that started the World Wide Web revolution. Mosaic 2.0.1 supports a variety of HTML features, although it can't display background colours or patterns. it can be sluggish, and it's pretty bare-bones: There's no drag-and-drop support, and you don't get a pop-up menu when you click on a hyperlink.



#### **Spyglass Mosaic**

Spyglass Mosaic 2.1 — an updated version of NCSA Mosaic — is the third-best Mac Web browser but has no compelling advantages over the top two. It's speedy and supports most Netscape extensions to HTML, and it offers some Spyglass innovations, such as client-side image maps, that are now supported by Navigator and Explorer. It is bundled with various books and software packages, including StarNlne's WebSTAR (\$799 RRP, Conexus, 02 9975 2799, fax 02 9975 2966).



#### ₹ 1/2 TCP Connect II

TCP Connect li 2.3.1 (\$285 RRP, Conexus), from InterCon Systems, is the ClarisWorks of internet access, offering e-mail, ftp, Gopher, and news in addition to Web access a pricey but convenient collection. As eWorld expatriates will remember, this browser is serviceable but painfully slow. It supports most HTML extensions but not Navigator plug-ins or any form of Java. We recommend it only if you must use just one application for all your Internet access.



lowed by a wait while Navigator redraws all the items on the previous page. In contrast, moving back one page in Explorer is nearly instantaneous, with the page appearing completely rendered. Likewise, selecting text takes noticeably less time in Explorer than in Navigator.

The method Explorer uses to render pages also beats Navigator's — page loading feels faster. It's just a matter of page-loading priorities: When Navigator loads a page, it can't display anything below any images that have yet to be loaded unless the Web-page designer has embedded the height and width dimensions of those images in the HTML code. Also, Navigator won't draw any part of a table until all the images in that table have been loaded.

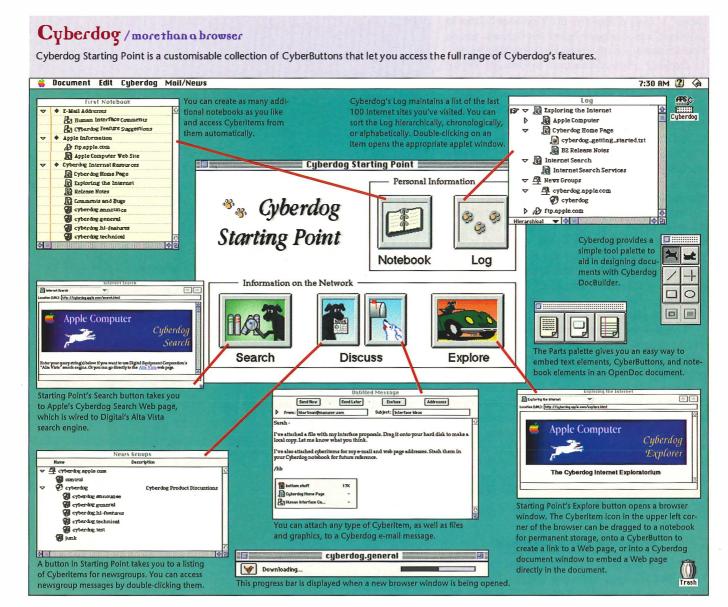
Explorer, on the other hand, is designed to display everything as quickly as possible. If an in-line image is present but the HTML code doesn't say what its height and width dimensions are, Explorer will draw a generic placeholder, render the rest of the page, and then move items on the page around once the image begins to appear. Tables appear as soon as they're loaded and then constantly redraw as their images are loaded.

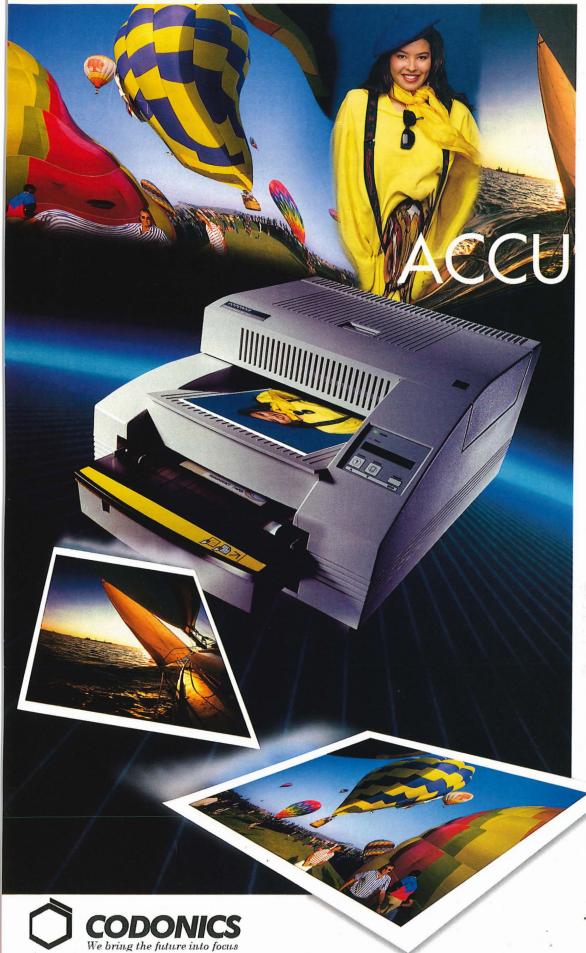
Even though each browser will take the same total time to download a full page of text and graphics, Explorer's method of always displaying as much of a page as it can (and first displaying the most-useful information — the text) makes it feel much more responsive.

#### Easy to handle

The two browsers have quite similar interfaces. Both include a tool bar, although Explorer's provides more options than Navigator's. Both display pop-up menus when you click and hold your mouse button on a hyperlink, offering the ability to open a link in a new window, download a file to disk, or copy an image to the Clipboard. Both use the same file format to store Bookmarks (in Netscape terminology) or Favorites (*á la* Microsoft) — names and addresses of your favourite Web sites. And both use a similar interface to organise that information: a Finder-like window.

Here the similarities end and Explorer's advantages begin to show. Although Navigator 2.0's





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bookmark manager is a big improvement over version 1.0's, it's slow and frustrating: the bookmark window may look like a Finder window, but you can't rename bookmarks without selecting Edit Bookmark from the Item menu. Microsoft's Favorites window, on the other hand, works like a good Finder window should — right down to the keyboard shortcuts. It's also much speedier.

Navigator does offer one interface element Explorer can't match: Netscape knows that when you're downloading a file, you don't want to stare at an empty Web-browser window. Taking a page from the book of ftp client software everywhere, Navigator creates a small, separate progress window while it's downloading files. In contrast, Explorer downloads files from within the browser window, wasting screen space and making it far too easy to mistakenly abort your download by clicking on a link in that window or by accidentally closing the window. Neither browser, however, can display information from ftp and Gopher sites in as Mac-like a fashion as can

#### Changing times / further battles in web war

Locked in a war for Net supremacy, Netscape and Microsoft are upgrading their Web browsers faster than any software has been upgraded In recent memory. Here's the latest news at writing:

#### Netscape

Code-named Atlas, Netscape's next-generation browser will offer a host of new features. Unfortunately, such attractive additions as CoolTalk, a technology that offers real-time voice conversations over the Internet as well as collaboration over a shared 'whiteboard', won't immediately be available in the Mac version.

However, Navigator 3.0 will offer the full Mac support for Java that was promised for all platforms for Navigator 2.0 but was delivered only In Unix and Windows versions. Version 3.0 will also offer enhanced security features, including digital signatures to verify your identity — you'll no longer have to enter a user name and password at every protected Web site.

Other new features include PowerPC-native support for Open Transport and for Internet Config — the set of shared Internet preferences supported by many Mac applications. Navigator 3.0 will also come up to par with Internet Explorer by supporting audio, video, and table-colouring HTML tags and by offering built-in support for several audio and video formats, including QuickTlme.

Navigator Gold, a soon-to-be-released version of Navigator 3.0, combines the ability to create and edit Web pages with all the features of the Navigator 3.0 browser.

#### Microsof

Meanwhile, Biii's troops aren't standing still. Internet Explorer 2.1 will add support for Frames and possibly for JavaScript — two features sorely lacking in the otherwise impressive version 2.0. Microsoft will also release a plug-In (compatible with Internet Explorer as well as Navigator) that brings ActiveX, the Internet multimedia technology championed by Microsoft, to the Mac.

Soon after, Internet Explorer 3.0 will arrive, offering support for Java, ActiveX, and HTML style sheets. With version 3.0, Microsoft will also offer a mail and news add-on, which will have full POP/SMTP mail-client capabilities and a threaded news reader based on John Norstad's popular NewsWatcher

-Jason Snell

Apple's Cyberdog (see *Walking the Cyberdog*), which works like the Finder in ways a Web-browser window can't.

Both applications offer acceptable AppleScript support, but Explorer also offers support for Internet Config, the Mac-only system of sharing preferences among various Internet applications — and a great time-saver for network administrators. If you use applications that support Internet Config (such as Claris Emailer, Eudora, NewsWatcher, Anarchie, or Fetch), then many common Internet settings — including information about file formats, server names, and e-mail addresses — don't need to be re-entered every time you install new Internet-savvy software.

Sadly, Navigator and Explorer are still annoyingly unstable — unforgivable behaviour for such important, everyday tools. Both crash much more frequently than other mainstream applications — and they usually bring the whole Mac down with them. (In our testing, Navigator crashed more often than Explorer. We extensively tested both applications exclusively on PowerPC-based machines.) And any use of plug-ins heightens the chances of a crash — in fact, our experience suggests that every popular plug-in is still susceptible to sudden crashes.

#### The battle for Internet dominance

This competition between two free products isn't making either Microsoft or Netscape much money (Navigator is actually free only to members of educational and nonprofit institutions). However, this battle is just the first shot of a growing war over the Internet.

With its agility as a startup company founded by Internet veterans, Netscape has quickly become a major developer of Web-browser and money-making server applications (none of its servers run on the Mac OS, however). Microsoft is using its formidable money and muscle to catch up — fast. Considering that Navigator currently holds between 80 and 90 per cent of the browser market, it'll be a tough chase, but Microsoft has time and has the resources to fight a very long campaign.

Since you can download both browsers from the Internet, you can easily try them out for yourself. Explorer is a fast, well-behaved, well-made product, one any Web surfer can use to travel the Net. And Navigator's immense popularity isn't a fluke — it's also a solid application that, with every successive version, seems to steer the Internet in exciting new directions.

But in the end, we recommend Explorer; it's the best Web browser available today. What's more, its price — free — can't be beat. In the first real battle of what is likely to be a protracted Web war, Microsoft has pulled off a surprise victory.

US MacUser associate editor/online Jason Snell has been on the Net for eight years and on the Web for about half that time. He is the coauthor of Providing Internet Services via the Mac OS (Addison-Wesley, 1996) and editor of the online magazine InterText which can be found at http://www.etext.org/Zines/InterText/











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# ReadMe

#### Offline assistance



Computer books, reviewed by Brian Forté.

The manuals that didn't ship with your software.

**S** oftware prices have dropped enormously over the last five years. In 1991 a copy of Excel cost around \$600: as I type these words, my local dealer is offering Word and Excel as a bundle for a little over \$200.

For better or worse, however, as prices have shrivelled, so have manuals. And while on-line help systems have been expanded and enhanced there are still times when leafing through a book is preferable to staring at a screen. A question worth asking these days, therefore, is whether or not that book should come from the software publisher or a third-party.

For users of the current version of Microsoft Excel, the question is almost moot, since neither it nor Microsoft Office (which includes Excel) ship with any paper-based documentation at all. Instead there is a leaflet explaining that the entire manual is available online. Anyone wanting a hard copy of the manual must pay an extra \$89.

Before filling out the order, however, consider *The Macintosh Bible Guide to Excel 5*, by Maria Langer, which covers everything from the absolute basics to complex concerns such as working with Pivot Tables and databases.

Excel's own manuals cover these topics as well, but the text is dry and lifeless, the book's layout is uninviting and, except for two pictures of the Help windows, there is nary a Mac-specific screen shot to be found. Moreover, the constant references to Windows-specific issues quickly becomes both distracting and irritating.

Langer's book, on the other hand, is engagingly but simply written, elegantly laid out (making getting at the info less work) and chock full of appropriate screen shots. As well, Langer's index is a joy to use and hardly mentions Windows at all.

Neither book will take you very far into Visual Basic but, for getting a grip on the capabilities of this monstrous application, Langer's effort is quite definitely the winner.

The new version of FileMaker Pro from Claris Corporation doesn't quite dispense with the manual but it comes close, shipping with a slim *User's Guide*, which covers the basics and not much else besides.

Chris Moyer's Special Edition: Using FileMaker Pro for the Mac, however, is more than capable of filling in the gaps. It covers the essentials at least as well as the slim volume supplied by Claris and goes into further detail just as effectively. Moyer's chapters on relational database design, using ScriptMaker and

making FileMaker Pro and Excel work together are worth the cost of the book on their own.

Moyer also goes into useful detail concerning the conversion of extant FileMaker 2.x databases to the current version and also covers the basics of using AppleScript and creating good entry forms. For the more ambitious, there are useful chapters on the FileMaker Pro Server, the FileMaker Solutions Development Kit (for creating stand-alone database applications with FileMaker Pro) and setting up FileMaker databases at the back end of a Web server.

In short, Moyer's tome is a must have for the serious FileMaker Pro user and developer and well worth considering even if you are just starting out.

Stephen O'Brien's *Using M.Y.O.B. Australian Edition*, is a mostly useful book. Rather than covering the capabilities of MYOB in an abstract fashion, O'Brien divides his book into chapters which coincide with the likely concerns of any small business owner looking to gain greater control over their business's accounts.

Like MYOB itself, O'Brien begins with the Setup Interview. From there he takes you through creating an Inventory, setting up your Invoicing and Accounts payable systems, using MYOB as a marketing tool, setting up a payroll, creating reports and forms and using MYOB for bookkeeping and jobs-based accounting.

O'Brien's lucid prose, along with the useful 'Plain English Please' side bars peppered through the book, help even a dedicated non-accountant such as your correspondent to make sense of MYOB.

O'Brien's work suffers, however, because of the almost complete absence of specific information for Mac users. Despite the blurb on both covers suggesting the book covers 'Windows 3.1, Windows 95, Macintosh and Power Macintosh' there fewer than half-adozen mentions of the Mac OS in the book, and one is a suggestion that Mac owners have a chuckle at the filename limitations of MYOB for Windows.

While it can be argued that much of the information presented is just as useful for Mac users as it is for Windows users, the absence of Mac keyboard shortcuts, for example, is evidence that the cover blurb has more to do with marketing than authorial intent.

If you can live with the strange screen shots and you know your Mac well enough to fill in the blanks then this is a worthwhile book. If you're just starting out, however, be prepared for more than a little confusion and frustration.

Title Authors Publisher ISBN RRP The Macintosh Bible Guide to Excel 5 Maria Langer Peachpit Press 0 201 88373 2

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# THE STATE OF

APPLE'S NEW OPERATING

SYSTEM IS CHOCK FULL OF HOT NEW

FEATURES, BUT DON'T PLAN ON

MAKING THE UPGRADE JUST YET.

BY HENRY BORTMAN

t's a shame that rewriting an operating system is such a major undertaking. The launch date of Windows 95 slipped many times before Microsoft managed to get its first 'modern' OS out the door. Likewise, Apple's efforts to get Mac OS 8 — until recently known by its code-name, Copland — into users' hands seem to be blocked at every turn. In fact, last year at this time, Apple was telling the world System 8 would be shipping by mid-1996. When it became apparent Apple wouldn't make that date, company representatives revised the estimate to the end of 1996. Now it appears that date, too, will pass Apple by.

The new official predicted shipping date is mid-1997. And, after an extensive look at the current state of System 8, we're hoping it'll be third time lucky for this software launch.

System 8 promises to be a hot ticket. With it, Power Mac owners will finally get the speed of a fullynative OS. The new system will run only on Power Macs and Power Mac clones; although the company is looking at ways to move some of System 8 onto older Macs, there are currently no plans to do a 680x0 version of the new Mac OS.

System 8 will introduce other performance enhancements as well: limited preemptive multitasking and protected memory and improved input/output (I/O) and networking support. In addition, Apple will introduce a host of interface improvements, giving the Mac the most flexible and customisable interface of any computer on the market.

#### Laying a new foundation

On the surface, System 7.5.3 seems in pretty good shape — millions of people use it every day with a minimum of fuss. Perhaps the most profound of the changes from System 7.x to System 8 will be the least obvious to users — the under-the-bonnet stuff.

Anyone familiar with the technical underpinnings of today's 'modern' computer operating systems can tell you that the current Mac OS is on shaky ground.

Frankly, it's an engineering marvel that users are able to do large-format, colour-critical publishing work and produce broadcast-quality video using an operating system that still has some hereditary links to the small black-and-white 128K Mac it was originally designed for.

The Mac pays a price for Apple's evolutionary approach to OS development: System 7.5.x is the topmost layer on an edifice of blocks piled up over the course of a decade, and the tower is beginning to teeter, compromising the OS' stability and performance. For the Mac to move forward, that OS needs to be rebuilt from scratch with new foundations. OS 8 is the first example of that reconstruction.

#### The need for speed

Mac OS 8 will be faster. First and foremost, the operating system will be entirely PowerPC-native, except for those parts that deal directly with 680x0 compatibility. In System 7.5.x, because the OS still contains significant chunks of 680x0 code, PowerPC-based Macs must switch back and forth between native and emulated portions of system software. When running native applications or performing internal system tasks, System 8 will not need to execute a single line of emulated code.

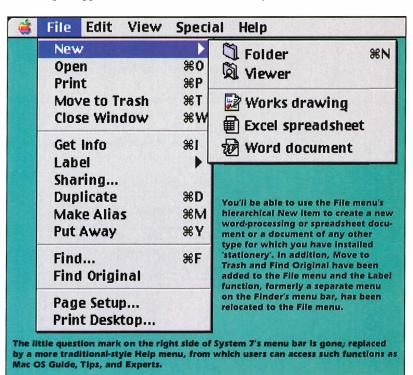
Perhaps the most basic change in the new OS will be in how the Mac schedules tasks. System 7 runs multiple applications simultaneously with a scheme called cooperative multitasking — when an application is active, it controls the processor until it relinquishes it. As a result, cooperative multitasking depends entirely on applications being 'good citizens,' and passing on control of the processor promptly. However, not all applications are good at sharing. If you've tried to do anything else while downloading a file in the background, you've experienced this noncooperation in action.

Today, a typical workday might find a user batch-sending and receiving e-mail messages online, copying graphics files across a network, and printing mail-merged letters — all in the background — while laying out a promotional brochure. Tomorrow's workday might add manipulating 3D elements as part of that page-layout document, which

is simultaneously being shared with a colleague across the country. That's a heavy load for any computer to bear, and today's Mac OS wouldn't be up to the task.

Preemptive multitasking will go a long way toward fixing this problem. It will assign a priority level to each program task contending for processor time — the system will 'schedule' tasks in a roundrobin fashion, but a high-priority task, such as typing, will preempt a low-priority task, such as printing. Preemptive multitasking will not only make more efficient use of system resources but will also ensure that when clicking the mouse or typing, users won't have to wait.

Mac OS 8 will employ preemptive multitasking in a limited fashion. All system functions will be preemptively multitasked, but applications won't be. This limitation is in the first release of System 8 so that the new OS won't 'break' with today's applications. According to Apple, later versions of the OS will fully



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System 7 gave us list views. System 8 will make them shine. New list-view column options include Type, Creator, and Comments — resize them and arrange them as you like.

implement multitasking once the majority of Mac applications are updated to support System 8.

Specifically, the parts of applications that can't currently be multitasked are the user-interface-toolbox routines. They will run in what Apple calls the 'cooperative toolbox environment'. As software developers rewrite their applications for System 8, they'll be able to code many portions of their programs - any parts that don't directly invoke user-interface routines - as tasks that can be scheduled preemptively. Using this technique, developers will be preparing their applications to support full preemptive multitasking when it arrives.

System 8 will also make more-extensive use of multithreading, in which programs are broken up into segments that can run independently. Apple's most visible use of multithreading will be in the Finder. It will at last be possible to initiate more than one filecopy operation at a time and continue working in the Finder while copying proceeds in the background.

Mac OS 8 will also come with a new virtual-memory (VM) model - one that works. System 7.5's virtual memory is so slow and inefficient that many users opt to leave it switched off. System 8's will be more robust, according to company claims, making it possible for users to work comfortably on a system with only 8MB of RAM.

With the new memory model, you should rarely see 'out of memory' messages. But, since virtual memory extends RAM by using the hard disk to store application routines, the more applications you run at once, the slower your Mac will be. Conversely,

installing additional RAM will boost speed, a correlation that is not true in System 7.5. One more thing you should know about OS 8's VM: you can't turn it off. As a result, you'll be hitting your hard disk more frequently under System 8. PowerBook users may want to carry a spare battery.

#### Stability reclaimed

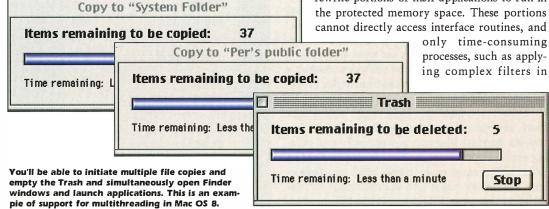
Another way in which the Macintosh's current memory-management scheme shows its age is in its lack of process protection. Macs crash — often. When they do, they usually have to be restarted from scratch. That means rebooting the entire system, including all extensions and applications, which can take several minutes.

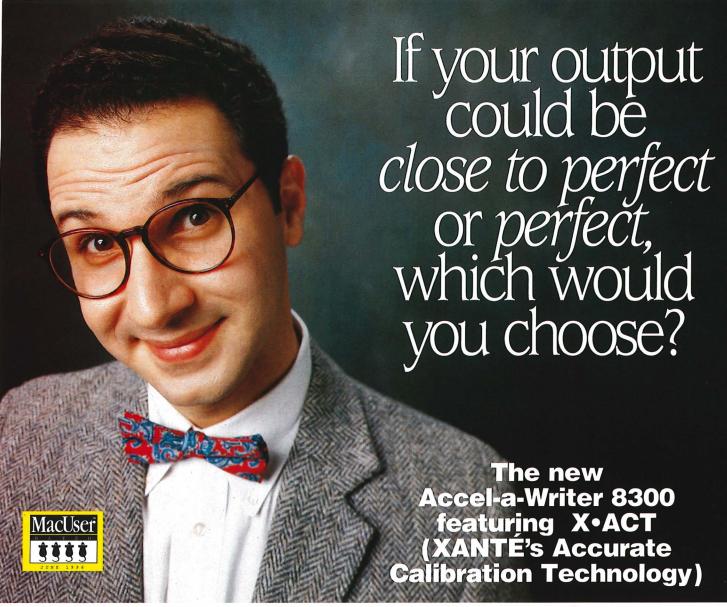
With System 8's new protected-memory scheme, Macs should crash far less often. And when they do, they won't bring down the entire Mac. If it's part of the OS that crashes, you'll have to restart only the specific system process (the routines for a particular activity) that crashed, instead of having to restart the entire system.

Unfortunately, as with preemptive multitasking, applications won't be able to take advantage of memory protection under OS 8, except in rare circumstances. So when an application crashes, it may bring down other applications. However, you should have to restart only the co-operative toolbox environment and your applications; most of the operating system - including such tasks as maintaining network and online connections and background printing - will continue to run. As with multitasking, developers can

rewrite portions of their applications to run in

processes, such as applying complex filters in





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puter. A parent with a home business will be able to set up a Macintosh with full access to all system functions for him or herself and create a restricted button-view interface for the children. Apple refers to these setups as workspaces. Each user's workspace preferences will be stored in a separate folder. A user will log in to access a workspace and log out when finished, to let another user access a different one.

7 items 298.4 MB in disk 200.4 MB

MacOS Folder

My Applications Files For Work

Chris Aaron

Kelly Pat

Mac OS 8 will let various people use the same Mac, each with an individual desktop setup known as a workspace.

One user will not be able to access files that belong to another user's workspace.

#### Ease of use

System 8 will also introduce several features designed to make the Finder easier to navigate. Dragging a folder's window to the bottom edge of the desktop, for example, will reduce the window to a tab that can be popped up again with a click. Clicking on desktop icons and holding down the mouse button will pop up a contextual menu giving instant access to commands related to that object; applications will also be able to take advantage of contextual menus. The New command, on the File menu, will be hierarchical, letting users create a wide variety of new documents — not just new folders — directly from the Finder. Get Info will not only give you volumes of information about a file but it will also display a small preview of its contents.

#### Tips and experts

One area Apple is constantly trying to improve is Help. In System 8, Apple Guide and Balloon Help will be augmented by two new forms of user assistance: Tips and Experts. If you've used Microsoft Excel, you've already had a taste of a similar tips system, which Microsoft calls Wizards. Tips will alert



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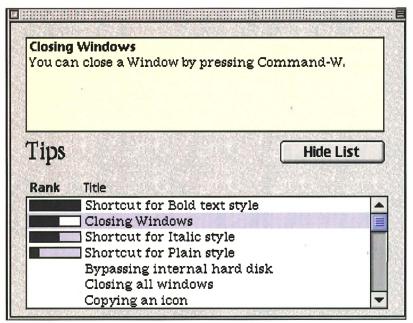
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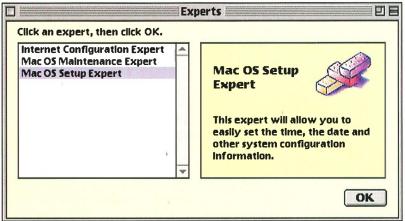
In Mac OS 8, If you perform the same operation repeatedly in what the system considers an inefficient way Mac OS 8 can let you know there's an easier way.

you when you repeatedly perform an action that could be accomplished more efficiently. For example, if you use a menu command repeatedly to italicise text, a tip will pop up about the keyboard command equivalent. Third parties will also be able to offer Tips under System 8.

Experts are more elaborate. They will help perform various system-setup functions — configuring a monitor, for example. But unlike Apple Guide, which guides you through setup functions by telling you what to do, an Experts dialogue box will 'interview' you, presenting available choices and asking what your preferences are. They will then do the work — a far more humane approach.

#### Find by content

In System 7, the Finder finally learned to find things, albeit slowly and one at a time. System 7.5 accelerated the process a bit. The Find capability in System 8 makes Apple's previous efforts look sad.



A derivative of Apple Guide, Experts will guide you through the series of steps required to perform complex tasks while shielding you from the tasks' complexity. The Mac OS Setup Expert, for example, will help you configure basic system settings without requiring you to hunt through a maze of control panels.

Driven by V-Twin, Apple's code name for a powerful 'information-access-and-indexing engine' developed by its Advanced Technology Group, Mac OS 8's Find command will be able to search not only filenames and folder names but their contents as well. You won't have to describe your search criteria with convoluted Boolean phrases either; plain English will do fine. You'll even be able to search by example, using one or more documents as reference points for your search. V-Twin will return the results of your request in ranked order, listing documents that correspond most closely to your search criteria first.

You'll also be able to save a Find request as a folder icon called a Viewer. Whenever a Viewer is opened, it will dynamically update itself to reflect any new, modified, or deleted documents that fit the search criteria. So, if you regularly download large amounts of information from the Internet and frequently search through it for the latest updates on particular topics, you'll have to set up your search only once. This is definitely a contender for the best new feature in System 8.

#### Integrated technologies

Three years elapsed between the 1991 release of System 7.0 and the 1994 release of 7.5. If Apple meets its latest estimated release date for Mac OS 8, we're looking at another three years between 7.5 and 8.0.

Apple component-software development, however, moves at a faster clip. Since 7.5 shipped, Apple has completed development on several new technologies: OpenDoc, QuickDraw 3D, QuickTime VR, and QuickTime Conferencing. Some of these have begun shipping as system enhancements on selected Mac models or as part of a bundle with third-party software. In System 8, all these technologies, along with QuickDraw GX and Apple Remote Access client software, will be fully integrated into the OS.

#### **OpenDoc**

OpenDoc, Apple's software-component technology, could have the most far-reaching impact since the original Mac on the way people use their computers.

We've all watched applications grow bigger with each new release. Unfortunately, what makes an application bigger often duplicates the same function in other applications on the same disk. Take spelling checkers. You get one with your word processor, another one with your spreadsheet program, a third with your page-layout program, and a fourth with your drawing application.

With OpenDoc, developers won't have to cram every feature imaginable into their applications. Instead, specific functions can be delivered as discrete components, known as parts, which can be shared by many OpenDoc-savvy applications, also called containers.

Apple will also use OpenDoc to deliver System 8's replacement for PowerTalk. If all goes according to plan, the Finder itself will be an OpenDoc container in the Mac OS release (code-named Gershwin) that will come after OS 8.



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Upgrade from 1.xx to 3.0.5 (Limited Edition)	\$377 \$447
Adobe Photoshop Upgrade 1.xx to 3.0.5 Upgrade from 1.xx to 3.0.5 (Limited Edition) Upgrade from 3.0.4 to 3.0.5 Updater/Patch  Upgrade from to 4.0 (release approx. Sep 96)	\$17
OUpgrade from to 4.0 (release approx. Sep 96)	POA \$324
Adobe Premiere Upgrade from ≥3.xx to 4.2 Upgrade from ≤2.xx to 4.2	\$368 \$368
Upgrade from Limited Edition to 4.2	\$368
Upgrade from 1.0 to 1.0.2	\$497
Adobe Streamline Upgrade 1.xx to 3.1	\$497 \$17 \$154
Upgrade from ≤2.XX to 4.2 Upgrade from Limited Edition to 4.2 Adobe SiteMill Upgrade from Pagemill Upgrade from 1.0 to 1.0.2 Adobe Streamline Upgrade 1.xx to 3.1 Adobe Type Manager ATM ≥ 3.8.0 to 3.9 Updater/Patch ATM < 3.8.0 to 3.9 Updater/Patch ATM ≥ 2.0 to Super ATM 3.9 + Updater/Patch ATM ≥2.0 to Super ATM 3.9 + Updater/Patch ATM ≥2.0 to Super ATM 3.9 + Updater/Patch	617
ATM ≥ 3.8.0 to 3.9 Updater/Patch	\$17 \$27 \$57 \$112
ATM < 3.6 (2 x 1.4 disks) to 3.9 + Updater/Patch	\$57
Adobe Type Manager Deluxe Upgrade to 4.0	POA
Adobe Type on Call Upgrade to 4.0	\$77
Adobe Type Manager Deluxe Upgrade to 4.0 Adobe Type on Call Upgrade to 4.0 Adobe Type Reunion Deluxe Upgrade from <1.2 to 2.0 (release approx. Sep'96) After Dark 3.0 to 3.0d Anals Share Undergrate to 3.6.1	POA
After Dark 3.0 to 3.0d	\$17 \$17
Apple Share Updater/Patch to 3.6.1	\$17
ClarisEmailer Upgrade from 1.0 to 1.0v3	\$17
Arter Dark 3.0 to 3.0d Apple Share Updater/Patch to 3.6.1 ClarlsDraw Crossgrade from competitive product ClarisEmailer Upgrade from 1.0 to 1.0v3 Claris FileMaker Pro Upgrade 1.xx to 3.0 Crossgrade from Competitive product Claris Impact v2.0 Upgrade from 1.xx to 2.0 ClarisWorks Office v4.0 Upgrade from Claris Works	\$105 \$17 \$130 \$130
Claris Impact v2.0 Upgrade from 1.xx to 2.0	343
Crossgrade from competitive product	COE.
Conflict Catcher 3 Upgrade from 23.0 to 3.0.4  CopyDoubler Upgrade to DiskDoubler Pro 1.1 Upgradefrom 2.xx to 2.0.6  CopyDoubler from 2.0.6 to 2.0.7  DiskDoubler Upgrade from 4.0 to 4.1 Update/Patch  DiskDoubler Upgrade to DiskDoubler Pro 1.1 Update/Patch from DiskDoubler 4.0 to 4.1	\$95 \$17
CopyDoubler Upgrade to DiskDoubler Pro 1.1	\$17 \$77 \$17
Opgrade roll 2.xx to 2.0.6     CopyDoubler from 2.0.6 to 2.0.7	\$17
DiskDoubler Upgrade from 4.0 to 4.1 Update/Patch	\$25
Undate/Patch from DiskDoubler 4.0 to 4.1	\$17 \$17 \$25 \$77 \$25
□DISKDOUDIEF Upgrade to DISKDOUDIEF Pro 1.1     Update/Patch from DISKDOUDIEF 4.0 to 4.1     DISkLock Upgrade to 4.0.1 \$77     DISK Manager Mac Upgrade 4.40 to 4.0.2c     ●Upgrade from ≥4.0 to 4.0.2c     FastBack Plus Upgrade to 3.0.1     Fontographer Upgrade from <4.0 to 4.1     Upgrade from 4.0 to 4.1     Freehand Upgrade from <5.0 to 5.5	
Disk Manager Mac Upgrade ≤4.0 to 4.0.2c	\$57 \$17
FastBack Plus Upgrade to 3.0.1	\$61
Fontographer Upgrade from <4.0 to 4.1	\$282 \$194
Freehand Upgrade from <5.0 to 5.5	\$231 \$187
Upgrade from ≥5.0 to 5.5	\$187 \$321
•In Control Upgrade from 1.0 or 2.0 to 3.0.7	\$27
Upgrade from <3.0.7 to v3.5 WorkGroups	\$27 \$97 \$27
MacLink Plus/PC Upgrade <7.5 to 8.1	\$187
MacLink Plus Easy Open Translators to 8.1	\$93 \$93
Microsoft Crossorades from a Competitive product	993
Upgrade from 4.0 to 4.1  Freehand Upgrade from <5.0 to 5.5  Upgrade from ≥5.0 to 5.5  Crossgrade from Illustrator, Canvas or MacDraw  •In Control Upgrade from 1.0 or 2.0 to 3.0.7  Upgrade from <3.0.7 to v3.5 WorkGroups  • Crossgrade from any other P.I.M. to 3.0.7  • MacLink Plus/PC Upgrade <7.5 to 8.1  • MacLink Plus Easy Open Translators to 8.1  Translators Pro to 8.1 \$93 PC Connect to 8.1  Microsoft Crossgrades from a Competitive product Office 4.2  \$425 PowerPoint 4.0	\$207
FeyDre I Ingrado from Standard to Dre 20	\$453
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Office to 4.2 \$425 PowerPoint to 4.0     Nortons Utilities Upgrade <3.1 to 3.2.1	\$207
Upgrade 3.2 to 3.2.1 OmniPage Upgrade from ≥1.0 to Pro 6.0	\$453 \$147 \$207 \$77 \$17
OmniPage Upgrade from ≥1.0 to Pro 6.0	\$397

Crossgrade from a Competitive product RAM Doubler from 1.xx to 1.6.2 Upgrade from ≥1.5 to 1.6.2 \$17	
SAM from ≤4.xx to 4.0.8 Upgrade	
Upgrade from ≥4.xx to 4.0.8	
Speed Doubler Upgrade from ≥1.0 to 1.1.2	
Suitcase from any version to 3.0 PCI/Power Mac	
Sultcase from any version to 3.0 P CI/Power Mac  • Upgrade from 3.0 to 3.0.1	

"●"Denotes new version and/or change in price

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Adobe (		
HUUDE F	Acrobat 2.1Contains Acrobat, Exchange, PDF	<b>*</b>
	Acrobat Search, Acrobat Reader on single-user	\$273 \$89
Adobe A	Acrobat Pro 2.1—Acrobat 2,1, Acrobat Distiller	\$783
Education Adobe A	on single-user Acrobat Pro 3.0 (release approx. Aug'96)	\$270 POA
Adobe A	Acrobat Pro 3.0 (release approx. Aug'96) Acrobat for Workgroups 2.1—Multi-platform	1
Educati	dows 3.1, Windows 95, Windows NT. CD-ROM \$ ion single-user	\$787
Adobe A	Audition 1.0—Premiere LE & Photoshop LE Dimensions—2.0—3D effects on 2D object	\$350
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	user \$389 Education single-user	\$195
Adobe r Adobe l	Home Publisher 2.0—Personal DTP program	9,977 \$88
Adobe li	Ilustrator 6.0	
Single-u Education	user \$665 Multi-user 5-Pack \$ ion single-user \$345 Education 10-Pack \$	2,921 1,271
Adobe F	ageMaker 6.0.1 Single-user	\$965
Adobe F	nal single-user \$845 Education single-user Pagemili 1.0.2 Create pages for World Wide Web	\$487 \$133
Adobe F	Pagemili 1.0.2 Create pages for World Wide Web Persuasion 3.0.2—Professional presentation	\$497
	Photoshop 3.0.5 esign and production. CD-ROM & Floppies	\$965
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Premie	ere (LE) bundled with Adobe Audition	\$350
Adobe F	Première 4.2	1 0/16
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Adone S	STREAMLINE 3.1—Automated production tool	\$87
Adobe S	Super ATM 3.9 Includes ATM, Adobe Type n, Font Substitution, Type On Call CD-ROM	\$144
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Adobe 1 Adobe 1	FextureMaker Texture design program	\$272 \$125
Adobe 1	TrapMaker 1.0 Type Basics—Adobe Type Manager + 65 fonts Type Manager 3.9 Single-user	\$258
Adobe 1 Adobe T	Type Manager 3.9 Single-user Type Manager Deluxe 4.0 (release Sen'96)	\$91 POA
Adobe T	ype Manager Deluxe 4.0 (release Sep'96) ype On Call CD-ROM 4.0	\$87
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Adobe V	Wild Type ATM 3.9 + 14 unique fonts	\$91
Apple P	ersonal Diagnostics 1.1.3 Software testing	\$184
At Ease	lemote Access Client 2.0.1 Server compatibilit 3.0 Access control for standatone Macintosh rushStrokes 1.0 Colourpainting & imagecreating	\$97
Claris Bi Claris D	rushStrokes 1.0 Colourpainting & image creating lraw 1.0 Easy draw functions in EPS,QuickDraw	\$47 \$184
Ciaris E	mailer 1.0 v3 Email management software	
Educatio Claris Fi	on single-user \$82 Single-user	\$97
Single-u	IleMaker Pro 3.0 Relational database manager sage Multi-User 5-Pack on single-user \$219 Education 5-Pack	\$967
Ciaris Fi	ile Maker Pro Development Kit 3.0 5	\$497
Claris Fi		1.650
	He Maker Pro Server 2 1 or 3 0	1,650 1,740
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#### QuickDraw GX

Despite its advantages, QuickDraw GX — Apple's advanced graphics technology — has languished, chiefly because of its RAM requirements. In Mac OS 8, QuickDraw GX will be the default imaging, typographic, and printing architecture. Integrating GX should encourage developers to adopt its superior typographic capabilities; its extensible printing architecture; and its graphics model, which offers benefits such as graphic-object transparency.

Apple will address the GX memory problem by rewriting GX to load into memory in small single-function segments, rather than in an all-or-nothing multimegabyte mass as it does now.

#### Multimedia

Although *Internet* may be the gold-medal buzzword of 1996, *multimedia* takes the silver. Apple has been hard at work developing technologies that make the Mac the multimedia-authoring platform of choice. With System 8, these technologies — including Quick-Draw 3D, QuickTime VR, and QuickTime Conferencing — will be fully integrated into the operating system.

QuickDraw 3D is a set of algorithms that will help make 3D images standard in documents, games, CD-ROMs and Web pages. QuickTime VR lets developers create virtual worlds through which users can navigate. These can be either real environments, based on photographs of actual places and objects, or artificial ones, created with modelling and rendering tools. QuickTime Conferencing lets users send video images across a local- or wide-area network.

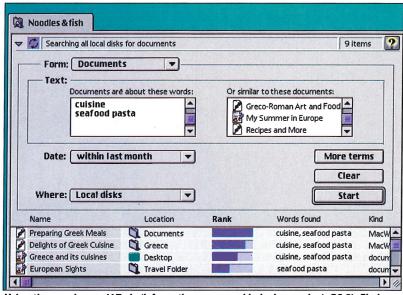
#### Taking the leap

It may be a bit early to be thinking about making the transition to System 8. Its commercial release is, after all, a year away. However, there are some things you ought to know when making long-range plans.

The first thing is that Mac OS 8 will run only on PowerPC-based systems. The new OS won't be compatible with Centris, Quadra, and PowerBook 500-series models upgraded with PowerPC processor-upgrade cards. Computers originally designed with 68040 chips and later upgraded with a full PowerPC logic-board replacement, however, will be able to run System 8.

The second thing you should know is that the transition from 7.x to 8.0 will be a bit rocky. As with past system-software upgrades, it is Apple's intention to ensure that today's Mac applications continue to work under System 8. But that may be tougher this time around than with previous OS releases.

To improve performance and stability, Apple had to break several things System 7 relies on. Extensions and control panels, for example, don't work under System 8. All hard-disk drivers and CD-ROM drivers also break. Apple is committed to providing replacement software for the parts of the system that will be made obsolete. The company is also investigating including third-party replacement software on the Mac OS 8 installation CD-ROM. And, for the first time with a new system release, Apple will let users keep



Using the speedy new V-Twin 'information-access-and-indexing engine', OS 8's Find function, which will be called Viewers, will be able to search not only filenames and folder names but document contents as well. The V-Twin engine will rank the results of what it finds according to how closely a document's characteristics match a specified request. If you save them Viewers continuously update in the background, adding and removing files as you create and delete documents.

their old 7.x System Folder around on the same hard disk as their new System 8 folder, providing a safety net for those who have problems when upgrading.

#### Hit or missive?

Will Mac OS 8 be a hit — or offer too little and arrive too late? Even the Great Karnak would have a difficult time making that prediction accurately: and not only because he's dead.

At writing, Apple is yet to ship its first solid devel-

oper release of Mac OS 8. And although the company has announced that the final version will be ready a year from now, it proclaimed with equal confidence last year that System 8 would be shipping by now. Until there's a version of the OS third-party developers can work with, it's anyone's guess when System 8 will really ship to customers.

In the meantime, Apple has some work to do to shore up the current Mac OS. With Windows 95 nipping at its heels, mid-1997 is a long wait for a major OS upgrade. Apple will integrate OpenDoc, QuickDraw 3D, and QuickTime Conferencing into its retail release of System 7.5.3 this year, and has announced a pre-OS 8 System update to be known as Harmony. If Apple wants the Mac to hold onto customer mind share, the company needs to deliver new OS features that provide immediate benefit. The sooner, the better.

Henry Bortman is US MacUser's technical director.



OuickDraw GX let users put printer icons onto the desktop. That capability is now built into System 7.5.3, even for those who don't run the GX extension. But Mac OS lets users move them off the desktop, into a folder.



By Mark Chipperfield

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ould you buy a computer from a supermarket? Software from a petrol station? Peripherals from a door-to-door salesperson?

If you answer 'No' to all three suggestions, then chances are your objections are probably based not on price but on a perceived lack of technical support and after-sales service.

As many computer users already know, buying a new computer, scanner, hard drive, printer, tape cartridge or software package involves more than just finding the best price. Without technical support, adequate warranty provisions and a sympathetic retailer or distributor, many of these items can prove to be costly non-starters.

The costs of repairing faulty equipment or resolving compatibility problems can easily nullify any price advantage you may have enjoyed when you first made your acquisition, as well as increasing your own anxiety level and eating up valuable computing time.

#### **Government failure**

Unfortunately, the consumer watchdogs in Australia and the various state and federal agencies have

been slow to address warranty problems in the computer area — not least because most computer software is supplied 'as is', with the warranty covering the diskettes only; while many warranties, such as Apple's, have special opt-out clauses which allow distributors to decided whether the problem in question arose from "misuse or unintentional damage of the equipment."

In fact, the Australian Competition and Consumer Commission (formerly the Trade Practices Commission) in Canberra told *Australian MacUser* that it was "not aware" of any complaints being lodged against the distributors of computer software or peripherals. This leads to the unlikely conclusion that consumer disputes are being settled quickly and amicably in the marketplace (see *Conflict resolution* for advice on such matters) long before the need for outside arbitration.

Despite blasé assurances from the ACC, disputes between computer owners, distributors and retailers are only like to increase in coming years. Increasing price competition — and the greater presence of non-brand components in the marketplace — has already created a dilemma for major hardware manufacturers

such as Apple, which are trying to defend market share without undermining their own quality control regime. Other players on the Mac OS block, such as Mitsui (distributor of Power Computing's Mac OS compatibles), are also under pressure to prove their after-sales and warranty credentials.

#### She's Apples?

Even Apple, renowned for its superb design and high manufacturing standards, has experienced problems with its newest product range, especially some Performa and PowerBook models; US analysts estimate that 20 per cent of all new Apple computers in that country could be affected by manufacturing defects.

In May, Apple Computer Australia announced that it would fix specific faults in these machines free of charge under a Repair Extension Program — but fell short of issuing a full product recall notice on affected models. Another problem for Apple is that to keep prices down, it purchases components from other manufacturers on a warranty-free basis. This means that everything bought under the Apple banner is limited to a one year warranty — even though the same component might enjoy a longer warranty if bought separately. Apple argues that if customers are unhappy with its universal warranty they can take out an extended warranty under the AppleCare Plus program.

Of course, the question of quality control is a big issue for Apple, which reported a loss of AU\$926.26 million for the last financial quarter. New Apple Computer chairman Dr Gil Amelio has identified "product quality and customer satisfaction" as his two key objectives for the corporation.

Apple Computer Australia says that the establishment of a Quality Council is one of a number of new initiatives (another is streamlining different product families) which will return Apple to its "traditionally high levels of quality and customer satisfaction." But Apple is not alone. A number of other hardware, software and peripheral suppliers are now trying to lift both quality control and their after-sales service — a few have recently rewritten their warranty cards, set up telephone helplines or have shaken up their distributor networks.

#### SyQuest changes repairs policy

A prime example of this new consumer-friendly approach is SyQuest Australia, the major supplier of Mac compatible tape cartridges and external drives. SyQuest is currently setting up a national network of certified dealers — that is, dealers who have undergone authorised technical training.

In future, the company will be recommending customers to only buy from one of its certified dealers, who are fully conversant with the common problems that can occur when matching SyQuest equipment with other systems.

"That way they'll get the right advice on installation," says Meyer Mussry, SyQuest's regional manager for Australia and New Zealand.

Now under pressure from rival storage vendor Iomega, SyQuest is quite rightly beefing up its aftersales profile (see *Lifting their game*) and addressing the more common technical problems that occur.

Indeed, the company says "over 80 per cent" of returned equipment was found to contain no hardware fault: the problem is usually one of software compatibility or poor installation.

"The whole issue behind this [certification drive] is that if you've got a happy user they'll probably tell ten people about it. If you've got an unhappy user they'll tell 30 people," says Mussry.

In addition, SyQuest has recently changed its warranty cover. At the moment the company offers a five year warranty on cartridges and two years on hardware. This will shortly be upgraded to offer customers a lifetime guarantee on cartridges, while the warranty on hardware will be reduced to one year.

While unable to offer an explanation for the warranty changes ("I don't know. I've got no idea. A lot of people have asked me that."), Mussry says that their implementation coincides with a number of other initiatives, including the introduction of a

#### **Conflict** resolution

/ five hints for canny consumers

Despite the rhetoric about 'putting customers first', computer companies and their dealers are sometimes reluctant to meet their obligations. The following advice offers some protection from unscrupulous vendors:

- You have the right to claim compensation or a free repair if the goods received do
  not match the description of what you agreed to buy; the computer system is not
  capable of doing what you told the retailer you wanted it for; or the computer does
  not work or is of poor quality.
- Set up and test the computer, peripheral or software in the shop before you take it
  home. Explain clearly what requirements you have and what the equipment or
  package will be expected to do. Make sure the computer, peripheral or software
  performs correctly.
- If the equipment does not work once you have taken it home, seek advice. Don't
  open the computer casing on any account since this may invalidate your warranty.
   Call the dealer straight away.
- The retailer has the main responsibility for fixing any problem. Approach the distributor only if the retailer fails to meet his or her obligations. If the defect is major you are entitled to a full refund or a new piece of equipment. If minor, the retailer may offer to repair the equipment or change a component you may reject such an offer.
- If you are unable to resolve the dispute with the retailer, you may lodge a complaint with your state consumer affairs office or department of fair trading, which will act as a mediator. The federal Australian Competition and Consumer Commission (06 264 1166) may intervene where companies have made false or misleading representations about warranty or contract terms. If still unsuccessful you may take the matter to your local small claims court or tribunal the amount that can be claimed varies from \$2000 to \$25,000 depending on where you live.

Compiled using information from John Popsil's *How to Buy a Computer* (Australian Consumers' Association, 1996).

seven-day-a-week hotline and improved documentation sent out with equipment.

SyQuest is also setting up local facilities in Australia which Mussry says will mean that returned equipment will no longer have to be shipped overseas for repair or replacement.

Apart from being able to offer a faster turnaround on returned equipment, the company also believes the new arrangement will allow it to monitor incorrect use or installation in the field, because SyQuest will be talking directly to users rather than working through retailers.

"For example, we've had a lot of people sending cartridges back saying 'I can't read my cartridge anymore.' When we investigate it we find they've sent their cartridges to their local bureau [and] the bureau had a problem reading the cartridge because their driver was incompatible. So [the bureau has updated] the driver on the cartridge... [then] the user's got a problem because he can't mount the cartridge."

Mussry identified another common problem: media defects which resulted from using general purpose formatting software.

By "upgrading user knowledge in the field" Mussry says the company hopes to iron out many of these annoying and recurring problems.

#### Mac OS compatibles sold down under

Power Computing distributor Mitsui Computer is taking a similar pro-active approach to problems arising from defective products or issues to do with installation and compatibility.

Simon Johnson, Mitsui's product marketing manager, says that the company always tries to resolve problems as quickly as possible — conscious that most of its customers are in the desktop publishing and enterprise sectors.

"We fix any problems that do occur that minute," he says. "It [just] takes someone like myself to make a decision."

Because of its distance from the Power Computing repair facilities in the United States, Johnson says Mitsui has taken a much tougher approach on quality control than other distributors might.

"If you're based in the US it's fairly easy to ship your unit back somewhere overnight and have it fixed. Well, I have to do the same thing here — only it's not quite that easy," he says.

"You can't just [say] 'Oh it's got to back to the US,' or 'the US policy is this."

Johnson says Mitsui sometimes replaces problem units if the customer can't afford the delay which might result from repairing the equipment.

"We're consumers as well. I yell and scream at people if something of mine is not right and I take that attitude [when] managing product," he says.

Of course, not all problems can be resolved simply. There is a significant 'grey area' between the suppliers of hardware, software and peripherals. The letters column of this magazine is full of people who get shuttled from one party to another, each denying responsibility for a particular problem.

#### SCSI scanners, not scuzzy service

This is something which Peter von Dietze, NSW state manager for Computer Enterprises of Australia (distributors of Umax scanners and the new Umaxbranded Mac OS-compatibles) said he was acutely aware of: although Umax does not undertake to resolve every compatibility problem it does ensure that every scanner links up with the available software.

"We're happy to give and take a bit," he explains. "If someone rings through and says they're having a problem with Excel I have to say 'I'm sorry can you refer back to your reseller', [but] there are some grey areas.

"We supply OmniPage and Photoshop with our scanners and we support [them] all the way. And we will make sure we can get the links happening with our scanners. The greyest areas on a Mac are when you're daisy-chaining down a SCSI chain and attaching your scanner locks [up] your chain. [These situations are] difficult because it is your problem even though it's not. So we go out of our way to solve them because in the end we want to have happy customers."

According to von Dietze, Computer Enterprises Australia currently offers free phone support and, in emergencies, the use of loan units. He also said the company would be introducing a free 1800 number for consumers later in the year.

At the same time, the company has also overhauled its warranty arrangements by offering buyers extended warranty and VIP treatment at a cost of between 5 and 10 per cent of the purchase price of a scanner. VIP status guarantees a 48 hour turnaround on equipment returned for repair — or its immediate replacement if the company is unable to meet such a deadline.

Although there had been no specific problems with retailers, von Dietze said that the company was acutely aware that some of the mass market chains had some difficulty in understanding scanner technology. For this reason, he recommended users to buy from specialist Umax consultants and some of the smaller retailers.

Like any other specialist product, he said, it was better to use a recommended reseller than go for the cheapest deal through a mass market retail chain when buying a scanner.

#### Falling short of the mark

According to the Australian Consumers' Association computers are "really no different from any other product" when it comes to legal rights and consumer protection.

Unfortunately, it seems they are. In the first instance, most software product is covered by no warranty whatsoever. Secondly, while retailers are obligated under the Trade Practices Act to resolve any dispute with a customer it is clear that many simply lack the technical expertise which would allow them to do so.

"Yes, I agree computer software is a grey area. We have had some complaints with CD-ROM product," said a ACA spokesperson. "All I can suggest is that you examine the package in the store before you buy it. You should explain carefully to the retailer what it is you want the software to do. Get it in writing if necessary."

Most of this advice presupposed a high level of technical knowledge on the part of the sales assistant and the consumers' ability to assert his or her rights up-front in what can be an intimidating retail environment.

Until the term 'authorised retailer' means 'dedicated to the consumer', would-be buyers of computers

and peripherals would be advised to read carefully the warranty provisions carried by each product and to examine what systems the distributor has put in place to handle break-downs, faults and other problems that will inevitably arise.

Mark Chipperfield owns a very old Mac Classic and a mouse that has given up the ghost. Despite this handicap, Mark writes about music, popular culture, marketing, travel and personal finance for publications in Australia, New Zealand and the UK.

#### Lifting their game / companies bet on their public image

Many vendors of computers, software and peripherals are rapidly revising their market strategies as quality control and after-sales service become high-profile issues:

Adobe has a standard 30-day warranty on its products There is a 1800 number available for unlimited useage by customers during installation (1800 809 1008) and a 1900 number for customers with technical questions once the software has been installed. The latter number is chargeable at \$3 a minute, with an average call taking five minutes. Any service enquiries may be addressed directly to Adobe on another 1800 number. Registered users are advised on software updates and are encouraged to request them free-of-charge during the 90-day qualifying period. Updates after this period must be paid for by the customer.

Apple, rocked by problems with some of its PowerBook and Performa models, has instituted a number of reforms to increase customer faith, including a Customer Satisfaction Council to monitor quality control. Apple's Customer Relations toll-free line (1300 300 995) operates seven-days-a-week, 9am-8pm.

Apple provides one year universal cover (defects in materials and workmanship) on all Apple products. AppleCare Plus Extended Warranty is available — the price depends on the product type and duration, which can vary between one and four years.

Claris International (Australia) has one of the most sophisticated technical back-up systems on offer. New purchasers of ClarisWorks, FileMaker Pro, Claris Organizer and other software have access to free technical support for an initial inquiry. Users may then choose one of the following levels of ongoing support: Standard (a 1900 number charged at \$3 per minute); Claris Advantage Support (\$89 per annum for a single software item); or Claris Advantage Premier Support (\$159 per annum for a bundle of software items). Corporate cover is also available. Technical support operates from 8am to midnight, seven days a week excluding public holidays. Claris currently offers a 30-day money back guarantee on all software. The software can be returned directly to the distributors for a full refund. Like most software, however, the warranty applies only to the diskettes 'under normal

use' for a duration of 90 days. There is a \$500 liability

limitation on damage caused by Claris software.

Hewlett-Packard offers a wide range of warranty and after-sales technical support services on its hardware products. Technical support options include on-site repair, express exchanges, free return to Hewlett-Packard for repair, and a phone-in support pack. The warranty options are: a one-year parts, labour and shipping-costs warranty with a three-day turnaround; a three year parts, labour and travel warranty with a next day response; and a one-year return warranty where faulty units are replaced within three days by Hewlett-Packard, which also pays for shipping. Hewlett-Packard also has a number of enhanced warranty services marketed as the HP SupportPack. The company operates two 131 numbers (charged for a local call) for warranty, technical and other inquiries — this service is available Monday to Friday, 7am-7pm.

Iomega distributor Polaroid (Iomega products are also distributed by Q\*Soft) offers a standard 12-month warranty on its products, but undertakes to exchange faulty or 'dead' units once tested. Polaroid also offers free technical back-up (1800 066 021) to its customers. Umax distributor Computer Enterprises Australia is overhauling its after-sales service by offering free phone support and Ioan units when required. A free 1800 number will be available later in the year.

Currently it provides a one year standard warranty which can be extended for another two years under a VIP program costing between five and ten per cent of the purchase price of equipment.

Power Computing distributor Mitsui undertakes to resolve any disputes as quickly as possible and honour manufacturer's warranty. Currently it is providing a one-year return-to-base warranty. Equipment should be serviced either by an authorised service centre or by Mitsui itself. Repairs are turned around within 48 hours where possible. All parts are fixed on a replacement basis.

SyQuest is currently setting up a certified dealer network in Australia. Details are available from your regional SyQuest office. Currently it provides a five year warranty on cartridges and a two year warranty on hardware. This will shortly be replaced with a lifetime guarantee on cartridges and a one year warranty on hardware.





#### Orders of service



By David Whitbread

Keep an eye on readability and follow some well-established conventions when you design orders of service. any people who prepare orders of service for weekly church services or weddings encounter a number of design issues.

When preparing an order of service for a wedding, one usually wants to make a worthy souvenir. By including a list of the bridal party, transcripts of the readings and the lyrics of the songs you can make the order of service a pleasant keepsake. By using a distinctive paper stock for the invitations, placecards and the like you can link the various items of wedding stationary. By incorporating photographs or illustrations you can further personalise your order of service.

You will often need to fit a large amount of material yet avoid additional production costs. Consider using columns, narrow margins and different type sizes: larger for responses and smaller for announcements.

Announcements and responses can have some similar content, causing typographic difficulties.

#### Responses

The typography of response sections, where a celebrant or minister says something to which the congregation responds, can be difficult.

Because the responses need to be read aloud by the congregation, you need to maintain readability. Consequently, the section to be read aloud should be set in lower case — capitals should only be used for proper nouns and the first word of each sentence. The type-face should be comfortable to read — nothing too decorative or unusual. Choose a size large enough for comfortable reading at arm's length: between 10 and 14 point, or even larger if you have many elderly guests or parishioners.

The celebrant's or priest's words need to be followed by the congregation but distinguished from the response, so use a different typeface also designed for comfortable reading: italic lower case is probably the best.

A common mistake is setting the response entirely in capitals, which slows reading dramatically and requires more room.

#### Type selection

A mistake often made with weddings is to choose a swirling script typeface which is difficult to read. Consider using a fairly traditional serifed typeface such as Garamond, Times, Galliard, Baskerville, Century, Palatino or Bodoni.

Decorative typefaces *can* be used effectively but they usually need to be set larger than 14 point. Use them for headings such as 'The Wedding of Jennifer and Matthew', 'The Signing of the Register' and 'The Exchange of Rings'.

Use font variation to signify different levels of information. Remember that some of the people attending a service, particularly in wedding congregations, may not know what is customary: consider including directions such as 'sit,' 'stand,' 'kneel,' 'sing' or 'say' using a clear typeface and perhaps small capitals.

#### Citing the Bible

There is a standard way of citing Bible references: 'John 3: 16' cites an individual verse and means 'a reading from the Gospel of St John, chapter 3, verse 16'. The colon follows the chapter number, and is followed by a space and the verse number.

'I Corinthians 13: 1–13' cites a chapter and means 'a reading from Paul's first letter to the Corinthians, chapter 13, starting at verse 1 and finishing at verse 13'. The 'first letter' is denoted by the Roman numeral for one, which is a capital *i*. Paul's second letter to the Corinthians would be cited: 'II Corinthians'. The colon follows the chapter number, and is followed by a space and the starting verse number, followed by an en rule (option-hyphen) and the closing verse number, with no spaces either side of the en rule. To abbreviate Bible sources, the same citation could read, 'I Cor. 13: 1–13'. Since Verse 13 is the final verse of that chapter, you could also cite it as 'I Cor. 13'.

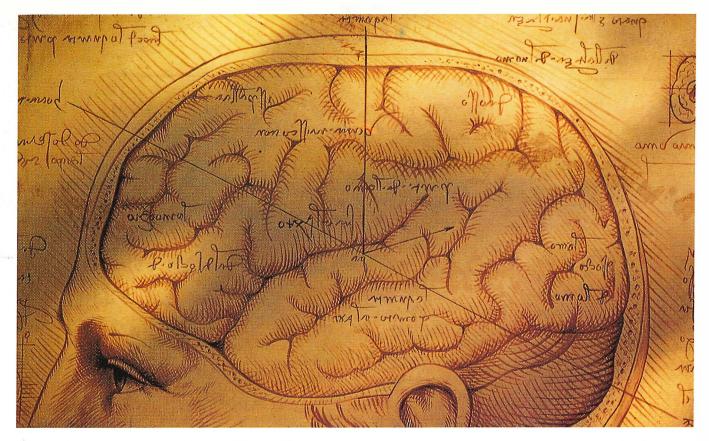
#### **Contractions and abbreviations**

Some Bibles will give a abbreviation guide in the contents listing at the front. here's the main principles:

Don't refer to saints as 'St.', they are 'St'. The full stop is not necessary because 'St' is a contraction, which means the final letter of the contraction is the final letter of the word that has been contracted, hence: 'St' for 'Saint' and 'Street'; 'Dr' for 'Doctor'; 'Rd' for 'Road'; and 'Ltd' for 'Limited'. Abbreviations take a full stop when their final letter is a letter partway through the word, thus: 'Cor.' for 'Corinthians'; and 'Inc.' for 'Incorporated'.

Another issue for orders of service is copyright infringement of song lyrics, which includes hymns. You must respect copyright laws and seek permission to reproduce lyrics as required. Usually the song or hymn book will have instructions on how to seek this permission on the reverse of the title page. The citation should be at the foot of the reproduced words and followed by the copyright symbol, © (option-G), and the owner of the copyright, whether that is the author, a publisher or a company.

David Whitbread is a publications designer and lectures at the University of Canberra. His e-mail address is dww@design.canberra.edu.au



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As the Internet takes bulletin boards and online for the Mac user with a

irtually no organisation can afford to ignore the Internet, and bulletin boards and online services are no exception. Every bulletin board (BBS) application is being rewritten to work over TCP/IP (Internet Protocol) connections. The world's largest online service, CompuServe, has announced plans to become a Web-based service. System operators (sysops) and Macintosh user groups are closing their BBSs and becoming Internet Service Providers (ISPs). And yet there are those who continue to prefer BBSs, arguing that they provide a sense of community, faster and more reliable downloads, and cheaper user charges.

The decline of BBSs isn't gossip — it's fact. The Australian BBS Registry currently lists 957 mostly DOS-based BBSs across the country. Although 16 new BBSs were launched last month, more than 38 closed. Furthermore, many sysops don't notify the registry of BBS closures, and it has been estimated that as many as 20 per cent of the included BBSs could well be inactive.

#### The financial imperative

Money motivates: no-one understands this better than Stuart Marburg, ex-sysop of the modest two-line BBS MacInsanity and emerging Internet tycoon.

The now defunct MacInsanity featured a comprehensive Macintosh archive, but ran on a DOS box because it was far cheaper than a Mac.

In six months, the board installed five phone lines and moved onto a Unix machine providing basic Internet functions: e-mail and newsgroup access. Six months later it had 40 lines and was booming. When the rest of the Internet was added — ftp, gopher, IRC and so on, Marburg completed the jump from BBS sysop to ISP. Netspace Online Systems was born, and two years later it has 220 lines in its Melbourne office, with additional outlets in Sydney, Brisbane and regional Victoria.

Marbug is not alone in making this transition, and he describes the most common growth path:

"You can start out by running a bulletin board as a hobby, and with a few donations or very minimal fees, add a few lines, and eventually purchase a small Internet feed. It is possible to fund new equipment without ever approaching a bank, so if things don't turn out as expected, you've lost nothing."

#### **Download dilemma**

One of the major reasons for MacInsanity's demise was the effort involved in manually uploading its Macintosh archives. Marburg admires sysops who still maintain file archives, but prefers the immediacy of the Internet:

# the world by storm, do services still cut the mustaved modem? By Warren Bond

Wdcgree software

"Before anybody knew what the Internet was... I'd drag [masses of software off the Internet] every week and stick them on my BBS for everyone else to download. After doing that for six to eight months, it can get pretty... time consuming.

"Bulletin boards do offer quick software downloads... but what happens if you download something that's not up to date? On the 'Net, you can always go to a few sites [where you] know they'll have the latest versions," says Marburg.

Despite the advantages of the Internet, however, a dedicated band of sysops and users continue to keep BBSs alive.

#### The quick download

Alex Lee, co-sysop of Newcastle's New-Mac, is particularly disappointed about the lack of users making true use of his system. Alex encourages users to stop off at a BBS, grab software the quick way, and then surf the Net with the latest tools.

NewMac is based on the BBS package FirstClass, which provides support for multiple simultaneous downloads in the background. Furthermore, FirstClass is one of several BBS applications that, unlike most Internet-based software, can resume downloads after a broken connection is re-established. And, in stark contrast to the Unix-based machines of the Internet, BBSs can host files that have not first been

encoded as text, or 'BinHexed'. BinHexing a file can increase its size by up 20 per cent, and the resulting file must also be decoded on the user's machine after being downloaded from the Internet.

However the performance advantage of BBSs, when compared to the Internet, isn't as large as many sysops would have us believe:

Profitable ISPs are well placed to offer more lines, faster lines, and better equipment than most BBSs. Many BBSs still use 14.4Kbps modems, so even slow connections to the Internet can provide faster downloads when you source software from Australian mirrors of the large Mac sites. Even on the World Wide

Web, if you remember to tell your Web browser the address of your ISP's proxy server (ask your provider) you may not have to retrieve data from the other side of the world whenever you 'visit' an overseas site. Also, Internet bandwidth is gradually catching up with demand.

#### The real BBS advantage

Whilst the download advantages attributed to BBSs can be debated, there are other areas where BBSs clearly stand out:

The Internet can be quite daunting to new users — its software is being continually tested and updated and sometimes its language seems to bear no resemblance to everyday English. Beginners could find many



Fans of the Info-Mac site on the Internet — home to much that is groovy in the way of up-to-date publicly distributable Macintosh software — will recognise these folders found on AUSOM's FirstClass BBS.

advantages in getting their feet wet at the BBS end of the online pool, where information is usually laid out in an orderly yet friendly manner.

The NewMac board is an impressive example of such BBS bonhomie, combining wit with intelligence: the conference area is entitled *Blah!Blah!*, the

games area *Killing Time*. Don't let this loungeroom style fool you, however. Conferences, for example, is a very powerful feature of FirstClass. In addition to Newcastle-only traffic, NewMac conferences are linked with the conferences on other FirstClass BBSs through nightly telephone transfers. There are dozens of such boards across Australia and New Zealand, linking a large number of users while maintaining a relatively local experience.

"The Net can't provide local information," says Lee, "if you [want to know] if a software title is available in your local city or town, you could get an answer [on a BBS] without having to visit or call the store yourself. BBSs and user groups are great places to sell hardware so you don't have to pay for handling costs. Local Mac game players can organise meetings where everyone brings their Mac, and then network them for games such as Marathon and Doom."

#### Integrating the new and the not yet dead

As with virtually all BBSs, there are areas on New-Mac for you to send messages to other users, download files, and even upload files, which is a nice

#### **BBS direct** / starting points for the Macintosh user

There is almost a thousand BBSs listed in Rodney Creer's Australian BBS Registry, but most either do not use the Mac-standard packages FirstClass and TeleFinder, or have failed to notify the registry of their relocation or demise. Here's a brief listing of current FirstClass- or TeleFinder-based BBSs that we know existed at writing — add yours to the national registry by sending e-mail to rodney@jigsaw.com.au

BULLETIN BOARD	MODEM NUMBER	CLIENT APPLICATION
ACT Apple Users Group BBS	06 288 1973	TeleFinder
Apple-Q's Abyss	07 3851 1711	TeleFinder
AUSOM	03 9545 5215	FirstClass
Club Mac BBS	02 314 1322	TeleFinder
Cosmos BBS Australia	07 3878 6301	FirstClass
Khazad-Dum	02 834 4689	FirstClass
MacConnection	02 9907 9198	TeleFinder
MacConnection	02 9907 0412	FirstClass
MacInTouch	02 580 0516	FirstClass
NAUG	044 23 3791	TeleFinder
NewMac	049 561 221	First Class
skyNET Australia	03 9562 2624	FirstClass
Vision	077 23 9170	FirstClass

gesture towards the online community you're joining. Many BBSs have also integrated standard Internet features such as e-mail and newsgroup access, and some offer full SLIP/PPP access to the Internet.

One organisation that has hedged its bets this way is the Apple Users Society of Melbourne (AUSOM). AUSOM has a FirstClass BBS, and also a Premium Access Board, which provides full Internet access.

Not unlike NewMac, AUSOM's FirstClass BBS offers extensive help for new and experienced users alike. By using the same software, AUSOM offers many of the same conferences as NewMac, but its files section is the real goldmine for Mac users, being a complete mirror of the famous Internet-based Info-Mac archives. Users get all the files Internet users cherish, with all the niceties of the FirstClass interface, which makes searching through a BBS as easy as poking around your own hard drive with the Finder.

#### Which client?

Choosing a BBS on the basis of the client software it uses is not difficult: only two, FirstClass and TeleFinder, come up to the Mac user's idea of acceptability.

As with FirstClass, TeleFinder offers Mac users a Finder-like interface with standard point-and-click icons. Navigating TeleFinder is simple but, in my opinion, tiresome — it feels like you're searching through an endless hard disk. FirstClass' mailbox style isn't perfect, but it's pretty good. On a purely subjective note, I think the FirstClass graphics are more polished: TeleFinder's look a bit cheesy to me.

Both offer private (e-mail) and public (conference) messaging. The method of initiating a FirstClass download isn't immediately obvious (you double click the file's name within a file description dialogue, generating a Save As... dialogue), but both systems are straight forward and understood in a matter of minutes. To initiate a TeleFinder download, just drag the icon of the file you want to one of your hard disk's icons, as you would in the Finder.

Overall, FirstClass offers more features, while TeleFinder's main interface is simpler and less cluttered, until you go digging for archives. I prefer First-Class because of its professionally handled national network of conferences. Conferences, the local alternative to global newsgroups, may well be the BBSs strongest and yet least exploited features.

#### **Civilisation online**

A friendly, well-lit place: that's what they used to say about eWorld, until Apple stopped paying the electricity bill. The perfect model of the civilised online service was unable to lure subscribers in a hurry to connect to the Internet.

In its own way, the Internet could gain the sense of community the BBSs claim. Computer-literate travellers are popping into Internet cafe's the world over to send e-mail and letters, or simply chat via IRC to friends and relatives. One Netspace user is logging between 400 and 500 hours per month 'chatting' with overseas friends via the keyboard. The competition facing BBSs and online services certainly shows no sign of

letting up in the near future. But while that kind of competition was expected, BBSs weren't expecting to fight off companies such as Telstra as well.

#### Telstra declares war on BBSs

BBS operators still have some fight left in them, having fought Telstra into a humiliating backdown. Telstra attempted to alter BBS phone tariffs from residential to business rates, a ploy that generated outrage from sysops across the country, and spawned a deluge of online scorn upon Telstra.

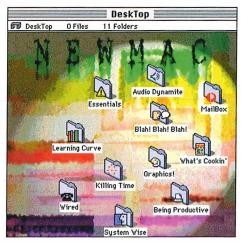
Telstra was attempting to recoup losses from BBS operators who were running multiple lines into residential houses. It doesn't have the infrastructure to cope with that kind of demand in a suburban situation, and was being forced to lay cable back to the exchange to handle it. Marburg is well aware of the dilemma that both Telstra and sysops face when running a growing online service from home:

"When MacInsanity became big, it started to become a real headache. Telstra spent days digging up streets, digging up footpaths, digging up everything. Pipes that I'd installed under the house to get the cable in only two months earlier all of a sudden weren't big enough. When we finally moved out of my house into an office, we had 42 phone lines. If you can imagine Telstra trying to get that many lines into a residential house - it was taking six, eight, nine weeks to get phone lines in, because there just wasn't enough cable anywhere."

Another aspect which angered sysops was that their names were sourced from the unofficial BBS registry, which mostly lists hobbyist BBSs which make no profit and could not afford commercial tariffs.

One scary thought for all online services is Telstra's refusal to rule out the future introduction of timed local calls. which would leave many services scrambling to find an untimed solution via Optus, or

force them to turn their modems off forever. The Telstra fiasco may have ben averted, but it does illustrate the tough road BBSs are currently travelling.

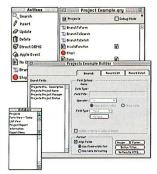


Newcastle's NewMac is a BBS that places a strong emphasis on the user experience.

#### **Online services**

Bigger than BBSs and smaller than the Internet, the online services CompuServe and Pegasus have both announced charge reductions to maintain their share of the online market. However, both services remain expensive for beginners who just want to play: CompuServe Pacific users pay around \$10 an hour (and more for specialised content areas); Pegasus





Tango is the rapid development tool with an intuitive graphical interface that lets you connect your FileMaker Pro database to your Web site in minutes - without writing a single line of HTML, C/C++ or Perl code.

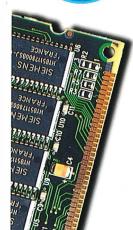
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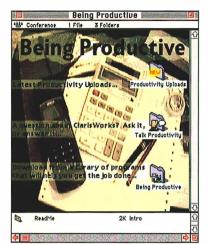
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Each of the folders in the NewMac's main menu open to submenus that are equally decorative.

access is as low as \$1 per hour, but only if you're in a local call dial up area and purchase 480 hours in advance.

Both services are strongly geared towards content: CompuServe remains business oriented, whilst education and conferences form Pegasus' backbone. Pegasus conferences cover diverse areas such as the environment, third-world development, education, culture, health, media, human rights and women's issues.

Internet access through either of these services is still more expensive than through a moderately priced ISP. In a sensible move, Pegasus has launched PAX, a service supporting unlimited

access to Pegasus content via any ISP for \$60 per year. For further information, contact Pegasus on pegasus@peg.apc.org

The eWorld lesson has not been lost on the online services, who are finally rushing to offer what most users want: full Internet access. CompuServe, the world's largest online service with over four million users, is following Prodigy, Microsoft Network and AT&T's service onto the Internet, and plans to complete the transition by the end of next year. What will 'Net-based online services be like? According to CompuServe claims, it will provide "a community feeling that you won't find on the Internet at large."

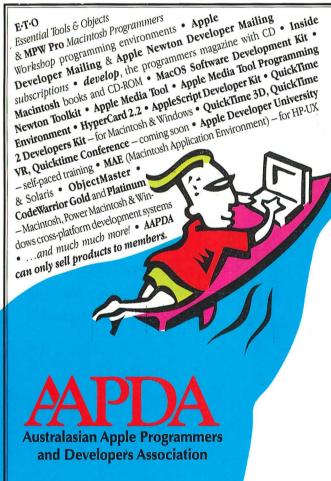
#### Where to from here?

Perhaps the best chance BBSs have involves targeting specific groups with specific strategies. If BBSs could add up the time and money it takes to download a year's worth of Mac software from a BBS, and compare the results to typical Internet figures, they'd probably win a few more converts.

"A Mac BBS should provide you with everything you need for your Mac. The 'Net should provide you with anything you need to fulfil your interests outside those of computing. It's a nice idea that we all use the Net to gather our resources... but I, like many others, am a student, and I cannot afford to pay for the services of an Internet provider," says Lee.

Unfortunately for Lee, the issue for most users is no longer cost. It's dynamic content and captivating graphics, a battle BBSs aren't likely to win. As long as BBSs remain a relatively disorganised minority, and the media continues its Web obsession, BBSs will struggle to shout their message to the masses. Alex Lee and other diehards like him will continue to do their part on the local front, but it may not be enough.

Warren Bond is still waiting for the world's first bulletin board dedicated to basketball, chocolate and fishing. Until that day arrives, he'll continue to run his modem into the ground playing on the Internet.



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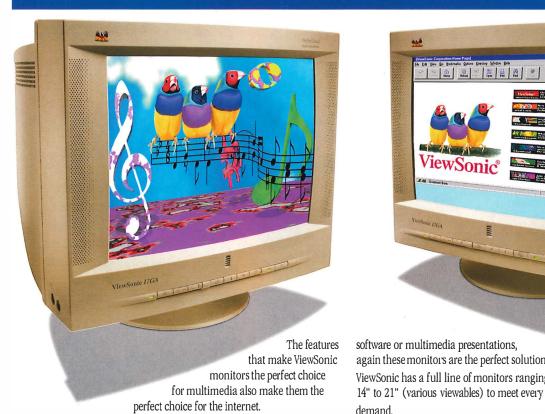
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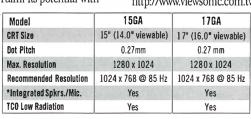
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## Don't shoot the messenger

inally it's here and available free on CompuServe, in Library 11, and on Apple Australia's ftp server, at ftp://ftp.apple.com.au/pub/Apple\_Software\_Updates%20/Newton/Other\_Newton\_Updates/CompuServe\_4\_Newton\_Mac.hqx

Unfortunately, there's little else good to report about CompuServe Mail for Newton (CIS Mail), the new CompuServe e-mail client for Newton 2.0. The comp.sys.newton.misc newsgroup and the Newton forum on CompuServe have been flooded with messages from frustrated users unable to get more than a yelp out of this undisciplined cyberpup. CIS Mail's pedigree is not in doubt — it's the son of CIS Retriever (see Australian MacUser, May 1996, page 84), and was developed for Apple by Black Labs Software. But it's Apple and CompuServe who have had to field most of the tech support questions.

For most people, the issue is not that you have to have mail to send if you are to connect, nor that the software segments incoming and outgoing messages into bite-sized pieces (one user reported receiving NewtNews as 14 different e-mails). It's not even that lines of text are missing from the beginning of each segment. Rather it's that for the majority, even for some very experienced users, CIS Mail just doesn't work: it doesn't connect, or (if it does) it doesn't retrieve messages and doesn't disconnect.

Some people have apparently got this software up and running without problems, however, so if you have a spare afternoon you might want to try your luck. Some tips to help you out: uncheck the 'Strip Internet headers' in CIS Mail's preferences (or e-mail sent to you will be headers only, stripped of the entire body of the message), and turn off 'Disconnect after sending' (because CIS Mail sends mail before retrieving messages). If you are using an Apple Newton 2400 Baud Modem, try using the Hayes EC modem setting.

If you're still having difficulties, login to Compu-Serve from your desktop Mac or PC, and from the Services menu 'GO OLDMAIL'. CompuServe is upgrading its old terminal emulation ASCII interface to Host Micro Interface (HMI) but this version of CIS Mail needs to use the old mail system. Select the old system if you have already been transferred to HMI. Some users also report success after changing their ASCII mail settings. 'GO NQA-1859', again from your desktop Mac or PC, select 'Access ASCII mail' which will switch you into terminal emulation mode, type in 'SET', hit your Return key, and change the MODE settings from MENU to COMMAND. Make these settings permanent.

After checking that I was still on the old mail system, and changing my settings as outlined above, I was able to send messages. However, I was greeted with a 48404 error when trying to retrieve messages. Another try, with CIS Mail preferences set to down-

load mail (rather than browse mail online) brought up a connection slip informing me that there were messages waiting, but CIS Mail was unable to download my mail. After every attempt I had to switch off my modem in order to disconnect.

If all this sounds more trouble than its worth, take heart. Apple has released the Newton Internet Enabler to developers and Internet mail and Web browser solutions for Newton are now in the post. Get your copy of NIE from ftp://ftp.apple.com.au/pub/Apple\_Software\_Updates%20/Newton/NIE

## Horses can fly

Followers of Greek mythology will know that when Perseus cut off the head of Medusa (whose glance turned onlookers to stone), a winged horse called Pegasus sprang from the body. In modern times, the birth of Pegasus - code-name for a new PDA operating system — has been no less gruesome. Described by those in the know as a subset of Windows 95, Pegasus was developed by Microsoft from the remains of its failed Pulsar intelligent messaging scheme and its abandoned WinPad PDA operating system. Unlike WinPad, Pegasus won't run Windows programs but desktop connectivity is recognised as key, and Pegasus OS applications will fully interact with desktop Windows applications. Don't underestimate Microsoft's ability to breathe new life into the PDA market: Pegasus seems to have attracted substantial interest from developers. Microsoft recently previewed over 50 PDA prototypes, produced by such companies as Casio and NEC Technologies, and devices running the OS should be out before the end of the year.

## Sayonara Steve & Walter

After eight years of working on the Newton, Walter Smith (father of the Newton's application programming language NewtonScript), said goodbye to Apple in April. He was followed by Steve Capps, coauthor of the original Macintosh Finder and for many the genius behind the Newton. Mac users will take little comfort from the revelation that both are now employed at Microsoft.

## Subscribe

OzNUG has created two new mailing lists: one for Newton users; the other for developers. To subscribe, send e-mail with 'subscribe' as the subject to newton-dev@moreinfo.com.au for the programmer's list, or newton@moreinfo.com.au for the users'.

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# ReView

## ScanJet 4p

## **Color OneScanner** 600/27

## Super Vista S-12

Type: Rating: Scanner 1/2

\*\*\*

Outstanding Very Good

RRP:

\$1005

\*\*\* \$1840

Manufacturer: Hewlett-Packard Apple Computer

\$1095

**Umax Technologies** Computer Enterprises of Australia

**Distributor:** 

Hewlett-Packard Apple Australia 131 347 02 452 8000 03 9898 7831 02 452 8160

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Telephone: **Facsimile: Reviewer:** 

Rick Oldano

## Three colour scanners

CAPTURING COLOUR IMAGES GETS CHEAPER AND EASIER

hree new sub-\$2000 colour scanners — the Hewlett-Packard ScanJet 4p, the Apple Color OneScanner 600/27, and the Umax Super Vista S-12 - will interest many home and small-business computer users, but they are decidedly not equal.

All three flatbed scanners ship with the necessary SCSI cables and terminators: the Umax uses an external terminator, and the Apple and HP models offer switchable internal termination. All three accommodate standard A4 pages, and the Umax and HP models are large enough to scan foolscap.

Each includes software for performing prescans, image acquisition and image editing, although they vary considerably.

## **HP ScanJet 4p**

The ScanJet features multi-functional easy-to-use software; friendly, thorough manuals; a simple colourcalibration system; and support for an optional automatic sheet feeder (\$980 RRP) for scanning multipage documents. It comes up woefully short in image quality, however. In our tests, scanned images generally

appeared fuzzy and consistently exhibited poor colour quality. Blues and greens appeared glaringly bright, and reds sometimes appeared washed out.

The main software for the ScanJet is Visioneer's PaperPort: it's main screen consists of a customisable tool bar - with icons that represent applications you can employ to manipulate scanned images - and a

large window where documents appear as small thumbnails after they've been scanned. To activate an application, you drag an image's thumbnail from the window onto the appropriate tool-bar icon.

Chief among the toolbar applications are PictureScan, which you use to adjust the ScanJet's settings, and Photoshop LE. Others include Paper-Port's optical character

(continued page 80)

Acceptable Poor Seriously Flawed Dangerous

**RATING KEY** 

**Our reviewers** evaluate, rigorously test and give detailed assessments of new release software and hardware. For brief reviews. turn to page 31.



Three entry-level SCSI-based flatbed colour scanners compete for the attention of home and small-office users.

## Three colour scanners

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Chief among the tool-bar applications are PictureScan, which you use to adjust the ScanJet's settings, and Photoshop LE. Others include PaperPort's optical character recognition (OCR) tool and ScanJet Copy, which lets you use the scanner and a printer as a copier.

PictureScan's scanning adjustments are intentionally limited: if the colours in your prescan don't look right — and most of ours didn't — there's little you can do other than scan the image and try to fix it afterward in Photoshop LE. The ScanJet's colour-calibration software, although easy to use, offered little help: we observed some improvement in colour quality after we calibrated the ScanJet, but colour images were still unacceptable on-screen and in printouts.

Part of the problem is PictureScan's inexplicable restriction of the Scan Jet to a maximum resolution of 200 dots per inch (dpi) — even though the hardware is capable of capturing images at 300dpi. HP claims that resolutions greater than 200dpi are overkill for most home and small-office printers. PictureScan therefore sets the scan resolution for most documents at 150dpi — even though one of the program's printer options is a 1200dpi imagesetter. We did find that a boost in scan resolution can make a big difference in image quality: HP is shortchanging users by denying them access to all that the scanner is capable of.

## Apple Color OneScanner 600/27

The Apple scanner delivers most of the advantages of the ScanJet *and* makes it easy to obtain acceptable-quality (if not picture-perfect) scans most of the time.

Dispatcher, the Color OneScanner's central application, presents you with four large buttons: Scan, for adjusting and controlling the Color OneScanner during image captures; Image Edit, providing access to basic image-editing tools similar to those in Photoshop LE; Scan Router, which lets you use the Color OneScanner as a copier or conventional fax machine (provided you have your own fax software), functions which are made even more useful with the addition of an optional automatic sheet feeder (\$495 RRP); and Archive, which lets you view scans as thumbnails.

With Dispatcher, dragging an application's icon onto the tool bar adds that icon to it; dragging an image file's thumbnail onto such an icon opens the file in the corresponding application. Apple supplies Xerox's TextBridge OCR application with the Color OneScanner and recommends that you use this dragand-drop approach to activate it.

Dispatcher's Scan dialogue box is simple yet flexible. You start the adjustment process by selecting an output device from a pull-down menu. Once you've done a prescan, you have the option of using slider controls to adjust the image's contrast and colour balance. You can also override the scan-resolution setting Dispatcher has specified for your chosen output device: making it easy to improve image quality considerably by setting a higher scan resolution.

## **Umax Super Vista S-12**

The Umax Super Vista S-12 is intended purely as an image scanner. It dispenses with OCR and copier functions in favour of tools devoted to obtaining high-quality image scans — and succeeds admirably.

The Super Vista ships with Photoshop LE and uses a Photoshop plug-in module, VistaScan, for image acquisition and scanner-setting adjustments. Because VistaScan is a subset of the module Umax supplies with high-end scanners, its interface may intimidate novices. Fortunately, Umax also supplies an outstanding tool called AutoScan, which automatically adjusts

## **AT A GLANCE**

## **SCANJET 4P**

Pros

Fully featured, easy to use.

Cons

Unsatisfactory image quality, especially at default settings.

**COLOR ONESCANNER 600/27** 

Pros

Integrated, easy-to-use software package.

Cons

Smaller image-capture area than its competitors.

**SUPER VISTA S-12** 

Pros

Excellent image quality, automated calibration option.

Cons

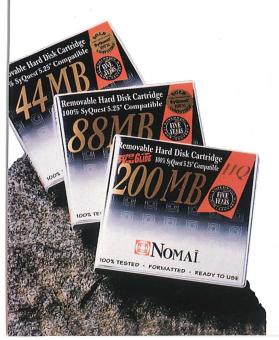
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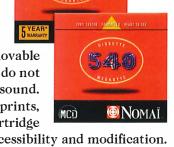


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Type: Multimedia authoring

Rating:

RRP: \$595; \$1895 Director Multimedia Studio.

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Distributor: Firmware Design

Telephone: 047 217 211

Facsimile: 047 217 215

**Reviewers:** David Biedny and Nathan Moody

## **Director 5**

## DESPITE A FEW SNAGS, UPGRADE OFFERS IMPRESSIVE BENEFITS

ongtime users of Macromedia's Director, the world's leading animation and multimedia-authoring program, will find much to like in the program's latest upgrade, a revision that also makes the dauntingly complex program more approachable for beginners. Enhancements in Director 5 address long-standing flaws in the program, simplify common tasks, and boost the program's overall speed and flexibility. Despite a few bugs, Director 5 is a mandatory upgrade for all Director users.

Director 5 retains its predecessor's vast array of tools for creating and editing interactive multimedia programs, but a new interface design — including tool bars, buttons, and streamlined palettes — makes program functions more accessible. By making tool functionality more obvious, the new design also lessens Director's still steep learning curve, so does a new online help system — one of the best we've seen — which reduces Director's printed documentation by about a third.

Beyond the new interface, one of the first changes experienced users will notice in Director 5 is its ability to create multiple casts, or libraries of animations, images, and other media for building Director projects. Previous versions of Director limited you to one cast per project. Version 5 lets you organise casts on a scene-by-scene basis and create templated scenes you can reuse by switching casts.

## **Additional fields**

Another new feature that simplifies scene creation is the ability to overlay a snap-to grid on the Stage — the active area where a Director movie's action takes place. This grid makes it much easier to arrange multiple objects and characters on the Stage. A buggy implementation limits its usefulness, however: If you don't create a grid at the outset of a project, you may not be able to turn it on later.

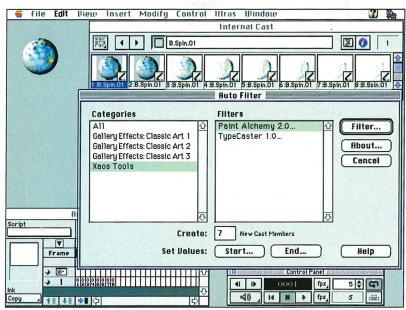
The new onion-skinning feature is better implemented. When you are animating a particular cast member, you can use this feature to see ghosted images of other nearby cast members as they appear in the current scene or in past or future scenes. This is a great help in coordinating object motions.

Director 5 at long last addresses one of the program's greatest historical weaknesses, type handling. Director can now generate anti-aliased type, which

greatly improves the appearance of titles, labels, and other text. Even better, it can also handle real-world typographic formatting — basic kerning, tracking, leading, indents, and tabs. These advancements are welcome, although there's still room for improvement: support for tabs and indents is weaker than we'd like, for instance. And anti-aliasing is confined to text you create as the author; text the user types in (a player name in a game, for example) is not anti-aliased. Additionally, although Director can now import raw text and RTF (Rich Text Format) files as cast members, many RTF attributes are not preserved, and we'd still like to see direct support for popular word-processing formats.

Director's paint module, long considered its weakest link, gets a much needed boost from the addition of support for Adobe Photoshop and Adobe Premiere plug-ins. The new Auto Filter tool even lets you apply some Photoshop filters over time, by 'tweening' from the unfiltered image to the transformed final one over as many frames as you specify. Unfortunately, only a small subset of the available Photoshop filters can be applied this way. Furthermore, using Auto Filter produced a variety of annoying redraw problems.

(continued page 84)



Via the Auto Filter tool, Director lets you interpolate some third-party Photoshop filters over time, like this gradual erosion effect in Xaos Tools' Paint Alchemy.

## **Director 5**

Not content with supporting a competitor's plugin scheme, Macromedia has introduced a new plugin architecture for Director itself. You can now use plugins called Xtras to add new tools directly to Director. Out-of-the-box Xtras include Animation Wizards — which automatically create simple text effects such as animated bullet charts, zooming, and scrolling — and a utility for batch-updating earlier versions of Director documents.

Lingo, Director's programming language, continues to enjoy meaningful improvements in version 5. More than 100 new commands have been added, including scripting for Shockwave files (the format for playing Director projects on the Web). Code execution is significantly faster, and an interactive debugger replaces Director 4's largely useless message window.

General playback improvements include the ability to preload a Director 5 movie in the background while another is playing, which boosts the speed of launching a movie within a movie. Director's tools for optimising playback from CD-ROM remain unmatched.

The price of Director has gone down significantly, especially when purchased in a bundle called Director Multimedia Studio — a tempting Macromedia suite comprising Director 5, xRes 2, Extreme 3D, Deck II and SoundEdit 16. The interaction among the various

Macromedia applications has been enhanced, with standardised interfaces and a new cross-application common scripting language. For example, double-clicking on an audio cast member in Director automatically launches SoundEdit 16.

### The Bottom Line

Nearly every enhancement in Director 5 makes the program more useful for professional multimedia developers. And although we're looking forward to a bug-fix upgrade in the near future, the flaws we uncovered were annoying but not project-threatening. These shortcomings aside, Director remains the most comprehensive authoring and multimedia-production tool available for use on the Mac and on Windows platforms.

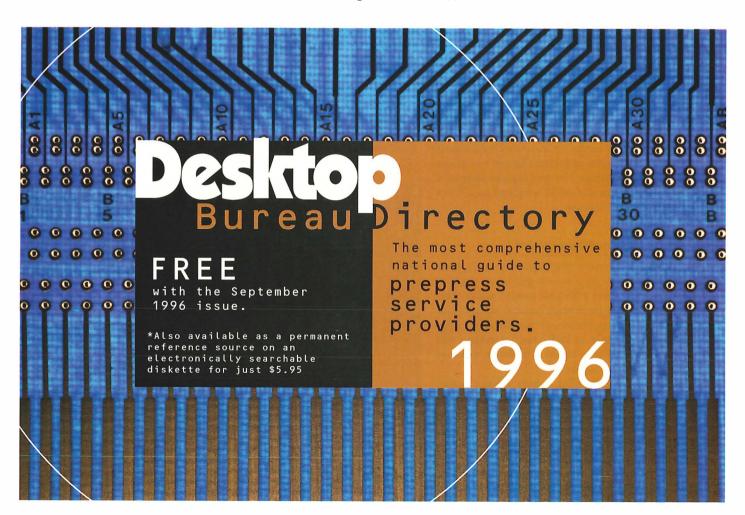
## **AT A GLANCE**

### Pros

A new interface design makes program functions more accessible; the ability to create multiple casts; the ability to overlay a snap-to grid on the Stage; improved type handling; falling price.

## Cons

Type handling still needs improvement; inadequate support for common text file formats.



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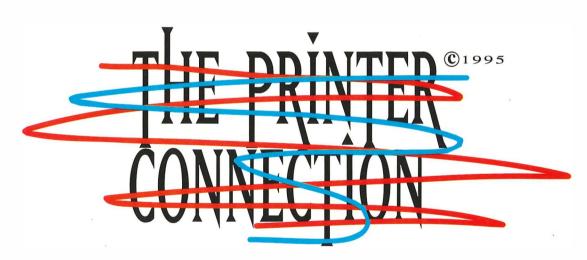
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Type: Scanner Rating: \$\footnote{\chicklet}{\chicklet}\$ RRP: \$751

Manufacturer: Umax Technologies

**Distributor:** Computer Enterprises of Australia

Telephone: 09 353 3411 Facsimile: 09 353 3412 Reviewer: Henry Norr

# **Umax PageOffice**

IT'S NOT THE ORIGINAL ARTICLE, BUT IT DOES SHOW PROMISE

The PageOffice, Umax Technologies' personal scanning system, won't win any prizes for originality — it's an unabashed copy of Visioneer's PaperPort Vx. But it has some advantages, and with a bit more refinement, it could give the PaperPort a real run for its money. Like the PaperPort, the PageOffice combines a compact scanner with software that lets you view, annotate, file, print, mail, or fax the documents you've scanned, as a graphic or editable text.

The hardware component of the PageOffice is a 300dpi, 8-bit-greyscale scanner. At more than 12cm deep, more than 30cm wide, and more than 27cm high, it's heftier than the petite PaperPort, but it's still small enough to fit on all but the most crowded desks — and it doesn't require a bulky power adaptor.

## **SCSI** scanning

Whereas the PaperPort currently requires a free serial port, the PageOffice connects to your SCSI port or SCSI chain, and it ships with a SCSI-ID selector, two 25-pin connectors, a terminator and a SCSI cable.

SCSI has two distinct advantages over a serial connection: first, most users have unused SCSI IDs available, whereas finding a serial port is a problem if you already have a modem and a printer or LocalTalk connection. Second, SCSI has much more bandwidth, so the scanner doesn't bog down even when doing large greyscale graphics. Visioneer should be shipping a SCSI option for its new PaperPort Vx model by the time you read this (\$105 RRP).

## Hardware highs

Because it includes a charge-coupled device (CCD) — the technology used in flatbed scanners — the PageOffice produces much better greyscale graphics than the PaperPort Vx, which relies on contact image sensors, the low-end technology used in fax machines. The original, non-Vx version of PaperPort doesn't do greyscale at all.

Furthermore, the Umax unit has an automatic sheet feeder that can handle up to 10 pages at a time; with the PaperPort, you have to feed each page manually. On the other hand, we ran into some problems with the PageOffice feeder — all too often, even when

we thought we'd seated the documents carefully in the feeder, they wouldn't go through without a push.

## The software side

Umax's PageManager application looks and works like Visioneer's PaperPort program. When you scan a document, it appears as an icon in PageManager. You can add comments, sticky notes, highlighting, arrows, or freehand markings and then drag the document to icons representing your printer, fax modem, or e-mail. Unfortunately, only Microsoft Mail, cc:Mail, QuickMail, and PowerTalk are currently supported.

PageManager lets you group documents into stacks and file them in folders, but it doesn't let you file by dragging and dropping to the Finder — an important and welcome addition in Visioneer's new PaperPort 3.5 software. Likewise, PageManager lacks the intelligent links that make it easy to move scanned data from PaperPort 3.5 to most popular applications, and aesthetically it's marred by ugly and often indecipherable Windows-style icons.

We also encountered several significant bugs in PageManager 1.0: scanning legal-sized pages produced only cryptic error messages; rotating images caused crashes; annotations wouldn't print. According to Umax, all these problems are fixed in version 1.01, which is now shipping with the PageOffice, and is available free online from ftp://www.umax.com/umax/PMGR101.sea.hqx

(continued page 88)



Slightly larger than the Visioneer Paperport Vx, the Umax PageOffice should nonetheless fit on most desics.

## **UMAX PageOffice**

## Words and pictures

Umax's optical-character-recognition (OCR) software is just about as good — or, depending on how you look at it, as bad — as Visioneer's. Accuracy is acceptable on clean, simple printed documents, but error rates are frustratingly high on real-life materials such as faxes, receipts, and newspaper clippings. If you intend to do significant amounts of OCR, you may want to invest in a package such as Caere's OmniPage or Xerox's TextBridge. In part because PageManager is not PowerPC-native yet, its appetite for RAM is more easily sated than PaperPort 3.5's: we left PageManager



at its default RAM allocation of 3MB and we had no trouble using any of the features, including OCR. That means the program, unlike PaperPort 3.5, can be used on an 8MB Mac.

## The bottom line

The PageOffice was until recently a Windows-only product, and Umax admits that it added Mac support in a rush. The haste shows, but we're glad Umax decided to reach out to Mac users. The Page-Office's SCSI interface, superior greyscale capabilities, automatic sheet feeder, and cross-platform support are significant advantages relative to the main competition, Visioneer's PaperPort line. Toll-free tech support is yet another plus for Computer Enterprises of Australia, local distributor of the PageOffice. If the company keeps its promise to polish up the product, the PageOffice will make a compelling alternative.

Henry Norr is editor emeritus of MacWEEK and a co-author of The Macintosh Bible, fifth edition, published by Peachpit Press.

## **AT A GLANCE**

### Pros

Uses SCSI. Modest system requirements. No power adaptor required. Automatic document feeder.

### Cons

Glitches in first version. Larger footprint than Paperport. Unpolished software.







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RRP: **Publisher:** 

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# Dr Seuss's ABC vs The Interactive Alphabet

EARLY CHILDHOOD SPELLING PRIMERS GO HEAD-TO-HEAD

**S** uccessfully teaching the alphabet involves repetition, entertainment and relating the letter to its sound. These two CD-ROM titles, Dr Seuss's ABC and The Interactive Alphabet, attempt this in significantly different ways, but both make learning

Dr Seuss's ABC features the humour and slick production of Brøderbund's Living Books and its successful printed namesake, a copy of which comes with the CD-ROM. On disc, the text and pictures are reproduced faithfully, whilst the animation brings the pages alive for three- to seven-year-olds.

The production is marvellous, the music wonderful and the humour very true to Dr Seuss. The Read to Me mode, however, includes extra action for each letter which may strain a small attention span. This detracts from the original work's poetry and repetition, while expanding its scope. In the Play With Me

> mode, the child is involved in the book: a mouse click brings animated surprises or reads out words.

> Other nice touches include the way each page is connected to the next by the letter just learnt: B is for Bye and F for Farewell. The ABC song, familiar to us all, is sung by the characters - reinforcing the sequence of the letters. Unfortunately, the content reflects its American origins, teaching Zee instead of Zed, for example. Luckily, most children can cope with giving this letter two names.

> The Interactive Alphabet from Corel is quite a different product, perhaps aimed at a slightly older age group, although no age is specified. It too has a page for each letter, but with more extensive text including some relatively difficult words. Definitions are available, which seems like overkill for children who may still be learning the letters.

The sound and animation is not up to the standard of the Living Books. Interaction with the pictures is limited to the words in the window and their associated animated sequences. In the text ordinary words light up in a different colour to the words beginning with the letter of that page. The extra text has the advantage of showing words in sentences with correct use of capital and lower case letters, but this is not so useful for gaining an understanding of beginning sounds that you associate with learning the alphabet.

Nice touches in The Interactive Alphabet include the ability to go to any letter using the alphabet bar on each page, making navigation very easy. The transition effect when turning a page is quicker and more pleasing than Brøderbund's running man. A volume control, the ability to reveal or hide definitions, and a quit override may also prove useful. There is supposed to be a choice between American or international versions, but Mom and pajamas, for example, appeared

A relatively powerful machine is needed to maintain synchronisation between screen and soundtrack, which may be a drawback for young children using hand-me-down hardware. An LC III (25MHz 68030) is the recommended minimum: a (16MHz) IIvi is not

There is little to find fault with in Dr Seuss's ABC as an alphabet learning tool and as entertainment. The Interactive Alphabet is also fun, but cannot decide whether to be a dictionary or a spelling tutor.



The graphics in Dr Seuss's ABC are true to the original book



The Interactive Alphabet offers more extensive text, and word definitions are available.

## **AT A GLANCE**

## DR SEUSS'S ABC

A quality production, typical of Brøderbund and Dr Seuss.

Content not localised. Could do more, and cost more, than is necessary.

## THE INTERACTIVE ALPHABET

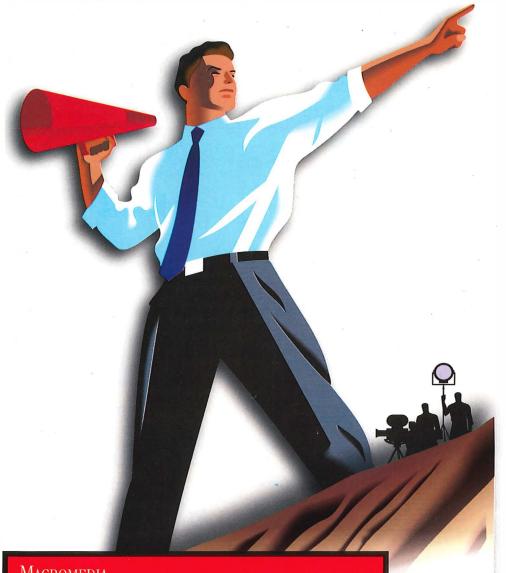
## Pros:

Detailed text may satisfy older users.

Content not localised. Sound and animations are a disappointment.

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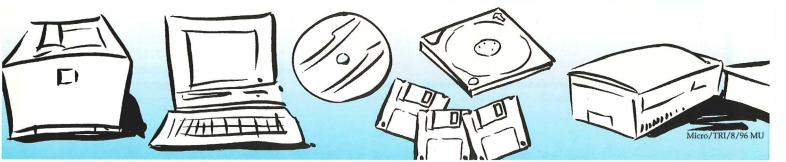
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# i Folder

## The silent sample

When I record sound (using the shareware SampleEditor) from an audio CD in the internal CD-ROM drive, I have to turn the sound in the CD Audio Player all the way up, and even then the recorded sound is very quiet. Is this a problem, a 'feature' or just bad karma? I do most of my work at night when the rest of the house is sleeping, so having to play James Brown at full volume is not very popular.

### **David Workman**

**Luke:** The maze of audio options is something that Apple has addressed in System 7.5.3, and not before time: finding the options for audio playthrough in the Sound control panel is far more difficult than it needs to be. It sounds like you've got Playthrough turned off, which means the only audio making it to the processor is the residual or feedback noise from the rest of the circuitry. To turn it on again open the Sound control panel, select Sound In and then Option, and click the Playthrough checkbox. Enabling playthrough will mean your housemates need not share their sleep with the Godfather of Soul, and are less likely to retaliate by playing Buck's Fizz in the morning. While you're at it, upgrade to Sound Manager 3.2 which supports playback in the background.

## Mac no-nos

I desperately need your help! I installed Snitch (a free utility that lets you modify several attributes from within a file's or folder's Get Info window) and selected Get Info on my Games folder. I checked the Invisible box. Now I can't find the folder! How do I get it back?

## Name withheld for obvious reasons

Chris: Hmmm, how can I put this delicately?

**Bob:** Watch it. We've got a subscription renewal at stake.

**Chris:** Fear not. The master of positive spin is on the case. Ya know, Mr or Ms Withheld, some of the most valuable experience one can gain comes from making mistakes. Fortunately, we can all learn from them. First we're gonna undo the one you've made, and then we'll go over a few more Mac no-nos, for the benefit of all.

**Bob:** Before Chris lets loose with the sermon, I'll provide the way out. You need a utility that can make the folder reappear, such as Evan Gross' \$US20 shareware utility collection, DiskTools (*see figure 1*). Open DiskTools, locate your Games folder in the scrolling list, click on the second button from the left (it's not labelled), and uncheck the Invisible box. Your folder is now back in business.

**Luke:** ResEdit's Get Info dialogue will let you fix the same problem — and make the same mistake.

**Bob:** By the way, Disk Tools is worth downloading for the main program alone, but you also get a killer calculator replacement, a wonderful note pad, and a couple of other nifty DAs. You were saying, Pastor Breen? **Chris:** Bob, Luke and I — in our never ending search for truth — have committed just about every fatheaded sin a person can perpetrate on a Mac. Perhaps we can save our readers a little grief by pointing out areas where we've ventured and where more-cautious beings should fear to tread.

**Bob:** I'll take software and start with the lesson learned from the experience of our anonymous questioner. Don't flirt with danger! Clicking on boxes marked Invisible or selecting menu options reading Erase, Delete, or Clear without knowing how to restore files or folders to their original state is a bad idea. Memorising the keyboard shortcut for Undo (Command-Z) is a must. Don't count on its working every time, though.

**Luke:** If you're using a new application, turn on Balloon Help from the Help menu — even if you're an experienced user. You will learn things!

**Bob:** Leaving yourself an escape hatch is particularly important when using ResEdit. We've said it before, and we'll say it again — when modifying a file with ResEdit, always work on a backup copy.

**Chris:** The following hardware tips may seem obvious to some, but ignoring them could land you smackdab in the soup.

Don't move a hard drive while it's turned on. Chances are you'll gouge a deep trench into a disk platter and your drive will be trashed. Likewise, plugging and unplugging cables while your Mac is switched on is a formula for disaster, particularly when messing with the ADB cables between your keyboard, mouse and computer. One pin bent in the wrong place, and kazap! — your ADB controller is a crispy critter.

**Luke:** Make sure everything is turned off before you connect it. Yep, some 'experts' seem to know the

tricks for plugging in devices 'hot', but even a single incident is likely to be a very expensive one.

**Chris:** And finally — I know this sounds bizarre, but I swear I've seen it done — covering your Mac, hard drive, or printer with a blanket to muffle the sound can also apply deep, penetrating heat to the hardware's components. The vents are there for a reason. Keep 'em clear of blankets, external peripherals, and your scrapbook full of old Help Folder columns.



Christopher Breen, Bob LeVitus, and Luke Oliver answer our readers' questions.

Write to:
Help Folder,
c/o MacUser,
PO Box 2043,
St Kilda, Vic 3182.

Mac common sense, word-processing nostalgia, and a case of hardware possession.

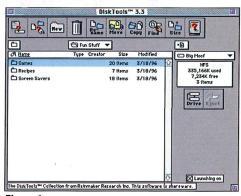


Figure 1:
DiskTools changes file and folder attributes and restores invisible files and folders with a click on a button.



## **Chequered Chinese dictionary**

Ever since I installed Nisus Writer with Language Key, I've been having font problems — my Chinese characters have turned into dingbats. I use Ed Lai's Traditional Chinese Dictionary (a HyperCard stack found at ftp://ftp.apple.com/pub/lai), and now the card in the stack that's supposed to contain the Chinese radicals [214 basic roots for all Chinese characters] is displaying dingbats instead. What's happened?

**Chris:** Normally, this would be dead simple. Care to

lay the groundwork, Bob?

**Bob:** Sure. Dan has a font-ID conflict. The Dingbats font installed by Nisus Writer (\$475 RRP, Trio Technology, 07 5577 4411, fax 07 5577 4455) has the same ID number used by Lai's Radicals font. When you open the dictionary stack, Dan, Dingbats is substituted for Radicals. To correct the problem, you should drag the suspect fonts from the Fonts folder onto the desktop and then onto the closed System Folder. System 7 automatically renumbers fonts when there's an ID conflict. If you're not sure which fonts are conflicting, you can download a copy of Rio Sabadicci's awesome font utility, Font Box. It will, after the payment of a modest fee, neatly organise your fonts and resolve nearly every font conflict known to humanity.

**Chris:** Normally is the key word. In this special case, neither of these solutions will work. Here's why: HyperCard stacks can contain several resources: PICT images, sounds, and (surprise, surprise!) fonts. The Radicals font, in this case, is contained in the HyperCard stack, not the Fonts folder. Since the font isn't in the Fonts folder, there's no way for System 7 to resolve the font-ID conflict. The conflict arises only when the Traditional Chinese Dictionary stack is opened. And because placing font resources in HyperCard stacks is so unusual, Font Box doesn't know to look for them there.

Here are a couple of workarounds. Use a utility such as Symantec's Suitcase (\$115 RRP, Symantec, 02 879 6577, 02 879 6805) to create a specific set of fonts to be used with Traditional Chinese Dictionary — naturally this suitcase excludes Nisus' Dingbats. Or, using Apple's ResEdit, change the ID number of the Nisus Dingbats font so that it doesn't conflict. Keep in mind that font-ID numbers below 1024 are reserved by Apple, so they shouldn't be used.

**Luke:** You can also use Font/DA Mover (how quaint!) to extract the fonts from the HyperCard stack and place them in their own suitcase. As Font/DA Mover normally only opens Font or Desk Accessory suitcases, hold down the Command and Option key when clicking the Open... button: this allows you to open any file.

Once you have the fonts in their own suitcase, drag them into the System Folder and you'll find they no longer conflict with your Nisus Dingbats.

**Bob:** Of course, the usual warnings apply — always make a copy of the file in question, and put the original in a safe place before you begin work on the copy.

## Sibling rivalry

I've been having a convoluted set of problems that seems to centre on rebuilding the desktop. Disk First Aid reports an "invalid sibling link" and says it can't fix the problem. What should I do?

Sadie Vizsla

**Bob:** The first thing you should do is...

**Chris and Bob and Luke (in unison):** ...back up your data!

**Bob:** You know you have semi-serious trouble anytime Disk First Aid (that handy tool on the Disk Tools disk that comes with your Macintosh) tells you it's found a problem and it can't fix it.

**Chris:** Don't wait for it to get better on its own. Unlike scraped knees and missing starfish legs, it won't. If you're good and back up your data right now, Bob will tell you how you might be able to fix it without reformatting your disk. Go ahead; we'll wait.

**Luke:** While we're waiting, there's a couple of tricks to rebuilding the desktop. Firstly, there are Desktop File problems that will survive a standard rebuild. The venerable TechTool (Micromat, Freeware) or FileBuddy (Laurence Harris, Shareware, \$US25) are utilities that delete the desktop file altogether, so a new one must be created from scratch. Secondly, look out for Macintosh Easy Open. This handy control panel is standard with System 7.5, and it makes its own amendments to the desktop file — you'll find your Mac rebuilding the desktop twice if it's disabled at startup.

**Bob:** Finished? Good. At this point, you have two choices: attempt to fix the problem, using Norton Utilities or MacTools Pro (\$179 each RRP, Symantec, 02 879 6577, fax 02 879 6805); or reformat (erase) your hard disk. Both these packages can fix damage Apple's Disk First Aid can't, although there's no guarantees. Either of them is worth a try, and no, I don't really have a favourite.

**Luke:** They both do a great job, but make sure that you're using a version that's up to date: there have been some really obscure bugs that can complicate even a simple repair in certain situations. And, as Frank O'Connor reminds us, Disk First Aid won't even attempt to fix the startup disk but the other two will, and often the results will not be as they could be. Check the instructions that come with each package in order to make a startup disk, and keep it handy — you'll save yourself hours when that unfortunate day arrives.





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## Say cheese!

Concerned that Goldilocks or someone like her has been sitting at your Mac while you've been out for a walk in the forest? If you own a Connectix Quick-Cam and have AppleScript installed, you can create a script to take a picture of the person sitting at your Mac whenever your Mac starts up. Here's how:

Copy Scott Gruby's shareware utility Photo-Capture from the QuickCam registration bonus CD-ROM to your hard disk, or download the utility from your favourite online site. Enter the following script in AppleScript's Script Editor:

tell application "PhotoCapture"

Capture to Clipboard

Capture to File "Macintosh Disk:images:Startup.PICT"

quit

end tell

Note: Substitute the name of your hard disk for Macintosh Disk. You can name the picture file anything you like.

When you run the script, AppleScript will prompt you for the location of PhotoCapture. In Script Editor, save the script as an application and place it in the Startup Items folder inside your System Folder. Create a folder called Images at the root level of your hard disk.

Now when you want to see who was at the Mac when it was last started, open the Images folder and double-click the enclosed Startup.PICT file.

**Matt Ferson** 

## Top ten hints for Mac-based designers

One: To get good results after scanning line art or black-and-white images such as logos, bring up the Brightness and Contrast dialogue boxes in a program such as Photoshop and set brightness and contrast to 20. You'll see the white backgrounds bleach to white and the black fore-

grounds set to solid black. Convert this image from greyscale to bitmap without dropping the resolution and you'll have a significantly smaller file that is still of excellent quality.

Two: When you import a graphic via Quark-XPress' Get Picture dialogue the graphic is generally cropped within the picture box. Make sure this graphic does not contain other elements that are 'hidden' outside the picture box as they will consume memory, generating larger XPress files, and delay printing.

Three: When creating QuickTime movies that presents a series of computer-generated stills, use 0.5

rather than 25 frames per second. The resulting file will be smaller and may not require compression.

Four: When using a desktop colour printer, try printing 8-bit or 256-colour images. They will be smaller and print quickly whilst still being of suitable quality for client 'mock ups'. Many desktop colour printers can only take advantage of these lower colour-depths anyway.

*Five*: A 3:1 compression ratio reduces an audio file to a third its original size without degrading it to the same extent as 6:1 compression.

Six: Folders open more quickly if you uncheck Calculate Folder Sizes in the Views control panel.

*Seven*: To quicken screen refreshes and redraws, check Black and White in the Monitors control panel — especially if you are working with a mono document.

*Eight*: To create smooth on-screen graphics and small files for multimedia, create images in Illustrator, them open them in Photoshop at 72 dots per inch and save them as PICTs.

Nine: When creating images for multimedia, always use 8-bit or 256 colour images, rather than 24-bit or 16.7 million-colour images, as most of your audience will use 8-bit displays. This contributes to smoother playback.

*Ten*: Photoshop files can be huge, so always crop close to the edges of your image, eliminating unnecessary white space.

George Moussa



## X-Wing

Divert energy from lasers and shields to your engines when you need to travel faster; then, even though it slows you down, set lasers and shields to maximum recharge before you enter battle.

**Bob Levitus** 

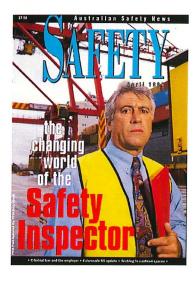
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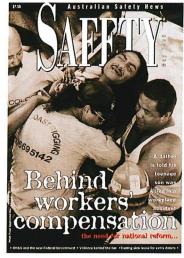
Further to Remote Control: just about any Sony remote control will

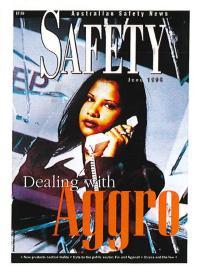
work with a remote receiver-equipped Mac as long as the Apple Video player extension is installed. You don't need the TV-tuner card. This is great for controlling your internal CD player. Note that double clicking the stop button usually ejects the CD.

For PageMaker 6.0 users, if you are getting 'general printer failure' and 'out of disk space' errors when you try to print, try turning on background printing. If you are using PageMaker in an eduction setting and use file locking software, make sure that the RSRC folder is not locked as this is where the file is spooled to.

Mark Bryce







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## Simple upgrades now!

If buying a new replacement machine is beyond your reach, or you've got an older machine with limited capacity gathering dust somewhere, there's never been a better time than now to use a little TLC and upgrade your machine.

Although accelerator cards and logic board upgrades are still too expensive when compared with the prices of the latest release machines, the bottom has literally dropped out of the memory market. By memory, we mean both RAM and storage.

Only 12 months ago, RAM cost between \$50 and \$70 per megabyte, while today it can be found for around \$20 per meg. One Melbourne reseller we spoke to was having a fire sale, with 8MB SIMMs selling at \$140 each, whilst other resellers' prices ranged up to \$180.

On the hard disk front, a 1GB drive was a big drive a year ago, and cost around \$1500. Today, a replacement for your old drive can be had for around \$600 (or less with trade-in), with the same crazy nameless reseller flogging 1.2GB Apple internal drives for just \$460.

Industry experts agree RAM prices in particular can't drop any further, so ring around to grab yourself a bargain, and give your productivity an instant boost without breaking the bank. 

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Power Mac 7200/120 18/1.2G/CD Power Mac 7200/120 24/1.2G/CD	\$4095	20° Multiscan	\$14095	PowerBook 5300/190 28.8 Modem PC Car	rd \$650 \$55
Power Mac 7200/120 24/1.2G/CD Power Mac 7200/120 24/1.2G/CD L2 Cache Power Mac 7200/120 8/8/1.2G/CD DOS	\$4395	Designer 8500 64/2GB/CD SyQ uest 20" Multiscan" Power Mac 9500/150 32/4GB/CD	\$15795	PowerBook Video Adapter Cable Duo Dock Plus	\$55 \$1595 \$795 \$240
Power Mac 7500/100 16/16/CD Producer 7500 32/16/CD* Power Mac 7600/120 16/1.2G/CD Power Mac 8500/132 16/1.2G/CD Power Mac 8500/132 16/1.2G/CD Power Mac 8500/150 16/2G/CD Designer 8500 64/26B/CD SyQuest* Power Mac 9500/150 32/4GB/CD No Video	\$4695 \$3995	Power Mac 9500/150 32/4GB/CD		Duo MiniDock PowerBook Duo Floppy Adapter	\$240
Producer 7500 32/1G/CD*	\$7095	App leVision 1710 Power Mac 9500/150 32/4GB/CD	\$14795	Monitors	
Power Mac 8500/132 16/1.2G/CD	\$7995		\$17095	AudioVision 14* Display (Trinitron) Apple Multiple Scan 14* Display Apple Multiple Scan 15* Display Apple Multiple Scan 175 Display Apple Wiltiple Scan 1705 Display AppleVision 1710 Display (Trinitron) Apple Multiple Apple Multiple	\$995 \$695
Designer 8500 64/2GB/CD SyQuest*	\$9995	Workgroup Server 6150 1 6/1.2GB/CD AppleShare Workgroup Server 6150 16/1.2GB/CD AppleShare/Web	\$5495	Apple Multiple Scan 15 Display	\$895
Power Mac 9500/150 32/4GB/CD No Video	\$11995	16/1.2GB/CD AppleShare/Web	\$5995	Apple Multiple Scan 1705 Display AppleVision 1710 Display (Trinitron)	\$1495 \$1895
Bundles		Workgroup Server 7250/120 16/1.2GB/CD	\$7995	AppleVision 1710AV Display (Trinitron)	\$1895 \$2295
(Includes CPU, keyboard and display unle	SS	1671.2GB/CD AppleShare/Web Workgroup Server 7250/120 Workgroup Server 7250/120 16/1.2GB/CD AppleShare/Web Workgroup Server 8550/132 24/2GB/CD DAT AppleShare Workgroup Server 8550/132 24/2GB/CD DAT AppleShare/Web	\$8495	Apple Multiple Scan 20" Display (Trinltron)	\$4495
indicated otherwise) Performa 580 8/80D/CD 14.4 Modem Calor StyleWriter 1500		Workgroup Server 8550/132	\$15995	Macintosh Display Card 8-24	\$1195
Performa 580 8/800/CD Color	\$3195	Workgroup Server 8550/132	<b>\$10000</b>	Newton Massaca Pad 400 0MB	¢005
StyleWriter 1500 Primary Learning	\$3195	Workgroup Server 8550/132	\$16495	Newton MessagePad 120 2MB Newton MessagePad 130 2.5MB Backlit	\$995
Per orma 5200 8/800/CD Additional CDs Per orma 5200 12/800/CD 14.4 Modem	\$3095	24/20/00 DAT Appleshake/Web Workgroup Server 8550/132 AppleShare 15" Mulliscan eyboard Workgroup Server 8550 132 AppleShar AppleVision 1710AV/Keyboard Network Server 700/150 48/46/CD DAT NEtwork Server 500/120 32/26 CD DAT NT Server100MHz 604 Series E 16/2. 1GB/CD NT Server 100MHz 604 Series E	\$16395	Newton Press Newton Connection Utilitites	\$89
Per orma 5200 12/800/CD 14.4 Modem Per orma 5200 12/800/CD 14.4 Modem Best Books	\$3295	AppleVision 1710AV/Keyboard	\$17995	Newton Connect Kit	\$199
Performa 52001V 12/800/GD 14.4		Network Server 700/150 48/4G/CD DAT Network Server 500/120 32/2G CD DAT	\$34995 \$24995	2MB Flashcard 4MB Flashcard	\$299
Modem Color StyleWriter 1500 Performa 5200TV 16/800/CD 28.8 Modem Performa 6300 12/1.2/CD 14.4 Modem	\$3695 \$3995	NT Server100MHz 604 Series E	044040	AC PowerAdapter Newton Print Pack	\$59
Performa 6300 12/1.2/CD 14.4 Modem	<b>*******</b>		\$11049	Fax Modem (stand alone)	\$185
14" Multiscan Performa 6300 12/1.2/CD 14.4 Modem 14" AV	\$3295 \$3595	16/2.1 GBX2 CD	\$13289	Battery Booster Pack	\$59
Power Mac 63 00 Biz Ed 12/1.2/CD 15" Multiscan MYOB	\$3595	NT Server 133MHz 604 Series E 32/2.1GB/CD NT Server 133MHz 604 Series E	\$12095	Recharging Station Rechargeable NiCad Battery Pack	\$399 \$599 \$185 \$199 \$199 \$49
Power Mac 6300/120 16/1.2G/CD		N1 Server 133MHz 604 Series E 32/4.3X2GB/CD	\$18999	Telescoping Pen Newton Keyboard	\$15 \$129
14" Multiscan Power Mac 7200/120 16/1.2G/CD SyQuest	\$3795 \$3995	PowerBooks & Duos		Printers	4120
Power Mac 7200/120 16/1.2G/CD SyQuest Power Mac 7200/120 8/1.2G/CD 14" Multiscan	\$3995	PowerBook 190 8/500	\$2495 \$3095	ImageWriter II Printer	\$745 \$425
Power Mac 7200/120 8/8/1.2G/CD DOS		PowerBook 5300/100 Grey 8/500	\$2895	StyleWriter 1200 StyleWriter 1200 EtherTalk	\$425 \$745
15" Multiscan Power Mac 7200/120 8/8/1.2G/CD DOS	\$5395	PowerBook 190cs 8/500 PowerBook 5300/100 Grey 8/500 PowerBook 5300/100cs 16/750 PowerBook 5300/110c 16/750 PowerBook 5300/117ce 32/1,1GB	\$4895 \$6495	StyleWriter 1200 StyleWriter 1200 EtherTalk Color StyleWriter 1500	\$525
1705 Multiscan	\$6095	PowerBook 5300/117ce 32/1.1GB	\$8995	Color StyleWriter 1500 EtherTalk Color StyleWriter 2200	\$845 \$795
Power Mac 7200/120 8/8/1.2G/CD DOS AppleVision 1710	\$6495	PowerBook 5300/100 Grey 8/500 28.8 Modem	\$3295	Color StyleWriter 2200 Battery Attachmen	nt \$995
Power Mac 7200 120 16/1.2G CD 15" Multiscan	\$4395	PowerBook 5300/100cs 16/750 28.8 Moder PowerBook 5300/100c 16/750 28.8 Moder	n \$5295	Color StyleWriter 2500 Color StyleWriter 2500 LocalTalk Color StyleWriter 2500 EtherTalk Personal LaserWriter 300	\$725 \$845 \$1045
POWER Mac /200/120 10/1.20/00	- 1	Powerbook 5300/ louc Stylewriter 2200		Color StyleWriter 2500 EtherTalk	\$1045 \$1095
1705 Multiscan Power Mac 7200/120 24 1.2G CD	\$5095	Battery Attachment PowerBook 5300/117ce 16/750 28.8 Moden	\$7195 n \$9395	LaserWriter 4/600 PS LaserWriter Select 360	\$1795 \$2395
Power Mac 7200/120 24 1.2G CD 15" Multiscan Power Mac 7200 120 24/1.2G CD	\$4795	PowerBook 5300/117ce 16/750 28.8 Moden PowerBook Duo 2300C 8/750 Modem PowerBook Duo 2300C 20/1GB Modem	\$6295 \$8295	LaserWriter Select 360 LaserWriter Select 360 Ethernet Adapter	\$2395 \$2695
AppleVision 1710	\$5895			LagarWriter 12/640 PS	\$3195
Power Mac 7200 120 24/1.2G CD/L2 Apple Vision 1710 AV	\$6195	Modem/Dock/Keyboard	\$7195	LaserWriter 12/640 PS 500 Sheet Feede LaserWriter 12/640 PS 8MB/Duplexing LaserWriter 12/640 PS 6MB/Duplex/500 LaserWriter 16/600 PS	r \$3695 \$3845
Power Mac 7500/100 16/1G/CD 15" Multiscan	-	Modem/Dock/Keyboard 15" Multiscan	\$7895	LaserWriter 12/640 PS 6MB/Duplex/500	\$4495 \$3995
Power Mac 7500/100 16/1G/CD	\$4695	Modem/Dock/Keyboard PowerBook Duo 2300C 8/750 Modem/Dock/Keyboard 15* Multiscan PowerBook Duo 2300C 8/750 Modem/Dock/Keyboard AppleVision 170 PowerBook Duo 2300C 20/1GB	5 \$8445	Laser Writer 10/000 PS Hard Disk/300	
1705 Multiscan Power Mac 7500/100 16/1G/CD	\$5395	PowerBook Duo 2300C 20/1GB	\$8005	Sheet Feeder Color Laser Writer 12/600	\$4495 \$11995
AppleVision 1710	\$5795	Modem/Dock/Keyboard PowerBook Duo 2300C 20 1G8 Modem/Dock/Keyboard 15" Multiscan PowerBook Duo 2300C 20 1G8 Modem/Dock/Keyboard AppleVision 170	40707	Peripherals	711000
Producer 7500 32/1G/CD AppleVision 1710* Power Mac 7600/120 16/1.2G/CD	\$8895	PowerBook Duo 2300C 20 1G 8	\$9795	OulckTake 150	\$895
Power Mac 7600/120 16/1.2G/CD		Modem/Dock/Keyboard AppleVision 1708	5\$10395	QuickTake AC Power Adapter (17w) QuickTake 150 Mac Interface	\$85 \$75
15' Multiscan Power Mac 7600/120 16/1.2G/CD	\$6695	PowerBook Recharge able Battery	\$275 \$105	Color OneScanner 600/27	\$1095
1705 Multiccan	\$7395	PowerBook 500 Intelligent Battery	\$225 \$125	Color OneScanner 600/27 Color OneScanner 600/27 with Auto Document Feeder	\$1495
Power Mac 7600/120 16/1.2G/CD AppleVision 1710AV Power Mac 7600/120 16/1.2G/CD	\$8195	HDI-20 External 1.4MB Floppy Disk Drive PowerBook Recharge able Battery PowerBook Duo Rechargeable Battery PowerBook Duo Rechargeable Battery PowerBook Duo Type III Rephargeable Battery	0105	AppleDesign Keyboard	\$250 \$545
Applevision 17 IU	\$7795	PowerBook 100 Battery Recharger	\$195	CD600e CD600e AppleDesign Speakers	\$695
Power Mac 8500/132 16/1.2G/CD		PowerBook Duo Battery Recharger	\$195	AppleDesign Powered Speakers	\$295

-\$100

CD600e AppleDesign Speakers

# Adindex

## Prices hold while bargains start to move

There has been some movement in the market over the past four weeks. Secondhand Macintosh prices have held for the past two to three months, and although there is only a low level of activity, prices are not dropping any further. Secondhand LC575s and Performa\_580s are good value when compared to the new product offerings. LC630s also sell for keen prices and are good value. The PowerBooks 180c and 190c are on the market for less than \$2000, whilst the PowerBooks 170 and Duo 280c sells for less than \$3000: reflecting a trend towards the newer 540cs and 5300 series.

The following list is compiled by Mac Rent as an approximate guide to secondhand prices. Mac Rent is one of the largest secondhand Macintosh dealers in Australia. All products are sold with warranty support. Contact Mac Rent in Vic on 03 9699 3999, ACT on 06 280 4470, QLD on 07 3367 3397, and NSW 02 9906 6888.

## **SECONDHAND MARKET PRICES**

	11-1-1-1	DESCRIPTION OF THE SAME	
Discontinued Macs		Duo 230 8/120 A/C Floppy	\$1200 \$1500 \$2000 \$700
Mac Plus	\$150 \$300 \$600	Duo 230 8/120 A/C Floppy Duo 250 4/200 A/C Floppy	\$1500
SE 4/40 SE 30 5/40 SE 30 8/80	\$300	Duo 270c 12/240 A/C Floppy	\$2000
SE 30 5/40	\$600	Duo Dock	\$700
SE 30 8/80	\$700	Current Macs	
Classic 4/40	\$700 \$400 \$500 \$600 \$700 \$800 \$800	Performa 580 8/250	\$2000
Classic 4/80	\$500	Doeformo EOO 0/000/CD	\$2000 \$2200
Classic II 4/40	\$600	Performa 5200/75 8/500/CD Performa 520017 12/800/CD 14.4 Moder Performa 52001V 16/800/CD 28.8 Moder Performa 5260 8/500/CD Performa 5400 8/1.26B/CD	\$2400
Classic II 4/80	\$700	Performa 5200TV 12/800/CD 14.4 Moder	n\$3000
Colour Classic 4/40	\$800	Performa 5200TV 16/800/CD 28.8 Moder	n\$3500
Performa 250	\$200	Performa 5260 8/500/CD	\$2500
LC 4/40 LC 4/80 LCII 4/40	\$200 \$300 \$300	Performa 5400 8/1.2GB/CD	\$3000
LCII 4/40	\$300	PEHUHIIA 0200 0/000/GD 14.4	
LCII 4/80	\$400 \$600 \$800	Modem 14" AV	\$2500
LCIII 5/80	\$600	Performa 6200TV 8/800/CD 28.8 Modem 14" AV	00000
LC475.8/250	\$800	Modem 14 AV	\$2900 \$2500
LG475 8/250 LC520 4/80/CD LC575 8/250/CD	\$1200 \$1800 \$1500	Performa 6300 8/1.2GB/CD	
LC575 8/250/CD	\$1800	Performa 6300 8/1.2GB/CD 14.4 Modem 14" Multiscan	\$2900 \$2200 \$2400 \$2500 \$2500 \$3000 \$5000 \$7000
LC 630 8/500 (no FPU) LC630 8/350/CD (FPU) LC630 12/500 DOS	\$1500	Modem 14' Multiscan LC630TV 8/500/CD (no FPU) 14" Multiscan LC630TV 8/500/CD (no FPU) 15' Multiscan Power Mac 6300/120 8/1,26B/CD Power Mac 7200/90 16/1GB/CD Power Mac 7500/100 16/1GB/CD Power Mac 8500/120 16/1GB/CD Power Mac 8500/132 16/1GB/CD Power Mac 8500/150 18/2GB/CD Power Mac 9500/132 16/2GB/CD Power Mac 9500/132 16/2GB/CD	\$2200
LC630 8/350/CD (FPU)	21/00	LC630TV 8/500/CD (no FPL) 15' Multiscan	\$2400
LC630 12/500 DOS	\$2000	Power Mac 6300/120 8/12GB/CD	\$2500
Mac II 5/40	\$100 \$300 \$400	Power Mac 7200/90 16/1GB/CD	\$2500
Mac II x 5/80 Mac IIcx 5/80 Mac IIsi 5/40	\$300	Power Mac 7500/100 16/1GB/CD	\$3000
Mac IIcx 5/80	\$400	Power Mac 7600/120 16/1GB/CD	\$5000
Mac Hsi 5/40	\$300	Power Mac 8500/132 16/1GB/CD	\$7000
Mac IISI 5/80	\$400 \$500 \$600 \$500 \$700 \$900 \$800	Power Mac 8500/150 16/2GB/CD	\$8500
Mac IIci 5/80	\$500	Power Mac 9500/132 16/2GB/CD	\$8500
Mac lifx 8/80	\$500	Power Mac 9500/150	
Mac IIvi 5/80 Mac IIvx 8/80	\$700	32/4GB/CD (no Video)	\$10500
Mac IIvx 6/00	\$900	PowerBook 190 8/500	\$1800
Mac IIvx 5/230/CD Centris 610 8/230	\$800	PowerBook 190cs 8/500	\$2400
Centris 610 8/230/CD	\$1000	PowerBook 540c 12/500 Modem	\$5000
Centris 610 8/230/CD Centris 650 8/230/CD Centris 650 2/230/CD	\$1000 \$1100 \$1500	PowerBook 5300/100 grey 8/500	\$2300
Centris 650 2/230/CD	\$1500	PowerBook 5300/100cs 16/750	\$4000
Quadra 605 8/250 Quadra 610 8/160	\$900	Power Mac 9500/150 32/4GB/CU Power Mac 9500/150 32/4GB/CD (no Video) PowerBook 190 8/500 PowerBook 540c 12/500 Modem PowerBook 5300/100 grey 8/500 PowerBook 5300/100 16/750 PowerBook 5300/100c 16/750 PowerBook 5300/100c 16/750 PowerBook 5300/100c 16/750 PowerBook 5300/170c 23/1GB	\$10500 \$1800 \$2400 \$5000 \$2300 \$4000 \$5000 \$8000 \$3500
Quadra 610 8/160	\$1000	PowerBook Due 2006 Modern	\$3500
Ullanta b IU 8/25U/GD	\$1200	PowerBook 5300/117ce 32/1GB PowerBook Duo 280c Modem PowerBook Duo 2300c 20/1GB Modem	\$7000
Quadra 650 8/230/CD Quadra 660AV 8/230/CD Quadra 840AV 16/500/CD	\$900 \$1000 \$1200 \$2000 \$1700 \$2800 \$11000 \$1600 \$2200 \$2000	FOWEIDOOK DUO 2300C 207 IGB MOUEIII	97 000
Quadra 660AV 8/230/CD	\$1700	Apple Monitors	.65
Quadra 840AV 16/500/CD	\$2800	12' Mono 12' Colour 13' Colour	\$200 \$300 \$400 \$600 \$800
Quadra 700 8/230 Quadra 900 8/160	\$1000	12 Colour	\$300
Quadra 900 8/160	\$1100	13 Colour	3400
UUadra 950 8/230	\$1600	14 COIOUT	\$600
Quadra 950 20/500	\$2200	14 AV	\$1000
Ouadra 800 8/230  Ouadra 800 8/230  Ouadra 800 20/500/CD  Power Mac 6100/66 16/350/CD DOS  Power Mac 6200/75 8/500/CD  Power Mac 6200/75 8/500/CD  Power Mac 8200/75 8/500/CD	\$2000	13 Colour 14* Colour 14* AV 16* Colour 21* Mono 21* Colour 27* Multisean (Trinitron)	\$1000 \$1500 \$2000 \$3500 \$1100 \$1600 \$2000
Power Mac 6100/60 8/260	\$1500	21 Mullu	\$2000
Power Mac 6100/60 6/350/CD DOC	\$2500	20" Multiscan (Trinitron)	\$3500
Power Mac 6200/75 9/500	\$1800	Annia Multiscan 1705	\$1100
Power Mac 6200/75 8/500/CD	\$2300	Apple Multiscan 1705 Apple Multiscan 1710 (Trinitron) Apple Multiscan 1710AV (Trinitron)	\$1600
Power Mac 7200/75 8/500/CD	\$2200	Apple Multiscan 1710AV (Trinitron)	\$2000
Power Mac 7200/75 8/500/CD Power Mac 7100/66AV 16/500 Power Mac 7100/80 16/700	\$2500		42000
Power Mac 7100/80 16/700	\$2800	Keyboards	6150
Power Mac 8100/80 16/500	\$3500	Standard	\$150 \$200
Power Mac 8100/80AV 16/1GB/CD	\$4000	Extended	\$200
Power Mac 8100/100 16/1GB	\$5000	Printers	
Power Mac 8100/110 24/2GB	\$6000	ImageWriter II	\$295
Power Mac 8100/80 16/500 Power Mac 8100/80 16/50P Power Mac 8100/100 16/16B Power Mac 8100/101 16/16B Power Mac 8500/120 16/16B Power Mac 9500/120 16/16B Power Mac 9500/120 16/16B/CD	\$2500 \$1500 \$2500 \$1800 \$2300 \$2200 \$2500 \$2500 \$3500 \$4000 \$5000 \$6000 \$6500	StyleWriter I StyleWriter II LaserWriter IINT	\$295 \$250 \$300 \$800
Power Mac 9500/120 16/.1GB/CD	S6500	StyleWriter II	\$300
	\$100	LaserWriter IIN1	\$800
PowerBook 100 4/20	\$800	LaserWriter IINTX	\$1000
PowerBook 140 4/40	\$1000	LaserWriter Select 300	\$500
PowerBook 100 4/20 PowerBook 140 4/40 PowerBook 145B 4/40	\$1200	Laser Writer Select 300 Laser Writer IIF Laser Writer IIG	\$1000
PowerBook 150 4/120 PowerBook 170 4/80	\$1500	LaserWriter 81G	\$1200
PowerBook 1/ U 4/8U	\$1500	LaserWriter 810	\$2000
PowerBook 160 4/40	\$2000	LaserWriter Select 360 LaserWriter Pro 630	\$500 \$1000 \$1200 \$2500 \$2000 \$2000 \$3000 \$8500
PowerRook 180 4/80	\$2400	LaserWriter 16/600 PS	\$3000
PowerBook 180c 8/80	\$2800	LaserWriter 16/600 PS Color LaserWriter 12/600	\$8500
PowerBook 165c 4/80 PowerBook 180 4/80 PowerBook 180c 8/80 PowerBook 190 8/500	\$2000		40000
PowerBook 190cs 8/500	\$2400	CD-ROM Drives	6000
PowerBook 190cs 8/500 PowerBook 520 4/240	\$2500	150 Payras CD	\$200 \$250
PowerBook 520c 8/160	\$3000	PowerCD	\$250
PowerBook 540c 12/500	\$4800	300	\$500
PowerBook 540c 12/500 PowerBook 5300/100 grey 8/500 PowerBook 5300/100CD 16/750	\$100 \$1000 \$1200 \$1500 \$1500 \$1500 \$2400 \$2400 \$2400 \$2500 \$4800 \$4800 \$4800 \$4400 \$4400 \$4400 \$4400 \$4400 \$4400	Newton	
PowerBook 5300/100CD 16/750	\$4400	Classic	\$300 \$500
PowerBook 5300/100c 16/750 Duo 210 4/80 A/C Floppy	\$5800	110	\$500
Duo 210 4/80 A/C Floppy	\$900	120	\$900

## Umax joins the club

This month, Umax joins a very exclusive club: it is one of three manufacturers of Mac OScompatibles that are active in Australia. Australian MacUser has already argued that Power Computing machines offer excellent value for mid and high-end customers and that the DayStar Genesis MP is ideal for very high-end work: the Umax Pulsar 1500 will appeal to those who want one processor today and two tomorrow.

## **MAC OS-COMPATIBLES**

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All information is supplied by official distributors. All prices are sales tax inclusive.

## DayStar Digital

(Distributed by Maxwell: 02 390 0200, fax 02 390 0201. Monitor sold separately. Bundled with extended keyboard. Four processors each.) Genesis MP 528 32/2GB/CD (4x132MHz) Genesis MP 600 32/2GB/CD (4x150MHz) \$24394

## **Power Computing**

(Distributed by Mitsui: 02 9935 2400, fax 02 9935 2500. Monitor sold separately. Bundled with extended keyboard, and utility and application software.)

tion software.)	
PowerTower 180 16/2G/CD	\$9595
PowerTower 166 16/2G/CD	\$8695
PowerWave 150 16/1G/CD	\$7395
PowerCenter 150 16/1G/CD	\$6945
PowerCenter 132 16/1G/CD	\$5795
PowerCenter 120 8/850/CD	\$4495
The same of the sa	

ILLUSTRATION: MARK MINTY

(Distributed by Computer Enterprises: 09 353 3411, fax 09 353 3412. Monitor sold separately. Bundled with extended keyboard, ready for dualprocessor upgrade.) Pulsar 1500 16/2G/CD

A.E.S.	30
Absolute Colour	17
Access One	42
ACE .	81
AGFA	115
Amicroe	18
APPDA	74
Apple	33
Aust.Corp Tech	99
Bits	45, 88
Bureau Scan	15
CAERE	85
Cannon	29
CEA	5,116
Claris .	19
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Designwyse	68 & 69
Elec.Accessories	88
Epson	21

Bit Bu CA Ca CE Cla Co Co Da DC De Ele Epsor **Finite** 73 91,95 Firmware Fosh 7 **GM** Computer 97 Hewlett Packard 35 IMA 20 Lasermaster 78 **LG Electronics** 89 23 Macacademy 56 Macs Place 36 & 37 10 MacTemps 47 Macwarehouse Maxwell 49, 57 **Memory Solutions** 73 Micro Access 92 Microseconds 28 Modem Connection 54 Next for Mac 60 13 Samsung Simms 2 Southern Graphtec 53 Streetwise 76 Symbiotic 22 TDK 59 The Printer Connection 86 Try & Byte 24 9 Unimagic Viewsonic 75 Wysisyg 82



### MACINTOSH AND NEWTON USER GROUPS (MUGS & NUGS) NAME CONTACT PHONE abc MUG (Melbourne) 03 9700 5853 Geoff Bongartz **ACT Apple Users Group** Steve Neilsen 06 295 8818 02 476 5792 Rick McI allen Apple Users Group (Sydney) Ann White 07 3878 2834 Apple-Q (Brisbane) AUSOM (Melbourne) 'The Administrator' 03 9654 1924 bOzNUG (Brisbane) Anthony McNamara 0414 586 211 Central Victorian Macintosh Users **Bruce Carruthers** 054 723 900 Club Mac (Sydney) lill Riddiford 02 363 9120 Great Western Users Group Jim Smith 02 604 7858 David Gray 003 432 514 Launceston Macintosh Lismore & District Mac Users Group Jaquei Ali 066 214 878 07 3224 5157 Macintosh Association of Queensland Michael Michaux mOzNUG (Melbourne) Chris Curnow fax 03 9686 1521 **MUG Sunshine Coast** Warick Josephson 074 474797 044 214 166 Nowra Apple Users Group Andrew Thorpe OzNUG (Sydney/national) Robin Simpson fax 02 261 8689 SA Apple Users Club 08 293 7183 lan Bagust sOzNUG (Adelaide) Indrik Kalnins 08 223 6155 Sunraysia MUG 050 222 712 **Barry Robertson** Toowoomba Apple & Mac Users Group Len Stroud 076 301 679 VMUG (Melbourne) **Brian Livingston** 03 9654 7322 Wollongong NAUG Kevin Smith 044 430 553 Fax alterations to this listing to the attention of Steven Noble on 03 9525 5628.

## **EVENTS CALENDAR — AUGUST 1996**

- G-B Inform 96, Adelaide Exhibition Hall and Convention Centre. Inquiries: Di Thompson, 08 338 2694.
- Data Warehousing World, Santa Clara, California. Inquiries: +1 508 470 3880, fax +1 508 4700526, http://www.dciexpo.com
- Data Warehousing World, New York. Inquiries: +1 508 470 3880, fax +1 508 4700526, http://www.dciexpo.com
- 14-17 MacSummit Conference, University of California, Santa Barbara. 'Educational digital imaging'. Inquiries: Debbie Barber, +1 805 893 3468,

dbarber@xlern.ucsb.edu

- G-18 Apple
  Technology Symposium,
  Brisbane Convention Centre,
  Queensland.
  Inquiries:
  Holt PR,
  02 9925 7400,
  fax 02 9925 7422.
- FilmTech 96,

  'When inspiration strikes —
  the explosive power of
  special effects and graphics',
  Billich Gallery,
  Sydney.
  Inquiries:
  Suzanne Burmeister,
  Avid Technology,
  02 9937 1800.

To ensure your exhibition, conference or Macintosh event is included in our calendar listing please address all relevant details to: Events calendar, Australian MacUser, PO Box 2043, St Kilda West, Vic 3182, or fax to 03 9525 5628.

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Deadline for September Australian MacUser is FRIDAY, AUGUST 2.

## CLASSIFIEDS

## **SOFTWARE**

Now Utilities v5.0 \$80; Now Contact & Up-to-Date v3.5 \$100; ClarisWorks v3.0 \$70; FileMaker Pro v2.0 \$80; PageMaker v4.2 \$160; FreeHand v3.0 \$100. All with manuals. Call Ian 02 796 4051 (BH) or 02 728 3579 (AH).

HSC Biology. Complete tutorial software package designed for NSW HSC course. Year 12 (3 core units) \$95, Year 11 (6 units) \$120, Year 11 & 12 \$180. New product. Free demo disk. Phone David 0419 402 684, or Study Bytes PO Box 2, Kingsgrove NSW 2208.

Macromedia Extreme 3D v1.0 retails for \$995, sell for \$300. Macromedia XRes v2.0, retails for \$995 sell for \$300. Both three weeks old, never used, original everything. Phone Mark 059 683 185.

## **DESKTOP MACS**

Four Macs, each with ColorPlus monitor: LC 6/40, \$700; LC 8/80, \$750; LCII 10/80, \$800;IIsi, \$1100. QMS 106e 10ppm laser printer with 4 toner cartidge \$2900. Nikon LS-

3510AF 35mm Film Scanner \$2000. Call Jason on 03 9525 5566.

## **POWERBOOKS**

PowerBook Duo 280c 12/320, excellent condition, 2 batteries, \$3500. Also Mac Plus, 2MB of RAM, very good condition, \$250 ono. Jorgen Computer Services, 03 9592 7500.

PowerBook 520c 8/500 including 13-inch RGB monitor; extended keyboard and mouse; software and manuals; SCSI cable; 14.4Kbps modem; and PowerPrint. \$3000 Call Michael on 02 719 1945.

## **MISCELLANEOUS**

AGFA StudioScan colour scanner. Complete with full Photoshop 3 bundle. Still in box, only 15 months old. \$1100 Sydney 809 0651.

Daystar Powercard 601 to upgrade LC575, LC580 or Quadra 605 to PowerPC 601/66. Includes 256KB L2 cache and System 7.5. Hardly been used. \$995. Ring Prash on 02 498 2196 AH.

Look@Me

## **TOP SELLING MAC PRODUCTS, JULY 1996**

The following top-selling product lists have been supplied by Apple-authorised reseller Choice Connections. Choice Connections has eight retail outlets nationwide. For more information contact Choice Connections on 131 417 or free fax 1800 809 952.

**Books** 

## Top ten CPUs

- Power Mac 7200/90 16/1 GB/CD ١.
- 2. Performa 580 8/800/CD
- Power Mac 7500/100 16/1GB/CD 3.
- 4. Performa 5200/75 8/800/CD
- 5. Performa 6300 8/1.2GB/CD
- 6. Performa 5200TV 16/800/CD 28.8 Modem
- 7. Power Mac 9500/132 16/2GB/CD
- 8. Power Mac 6200/100 8/1.2GB/CD
- 9 Power Mac 7600/16/1.2/CD
- 10. Power Mac 8500/132 16/1.2GB/CD

## Top ten applications

- Adobe Photoshop v3.0
- 2. Adobe PageMill
- 3. FileMaker Pro v3.0
- **QuarkXPress**
- 5. Microsoft Office
- 6. ClarisWorks v4.0 upgrade
- MYOB
- 8. Quicken v5
- 9. Adobe Illustrator v6.0
- 10. Netscape Navigator v2

## Top ten games & education

- Smart Fun for Kids II
- 2. Learning for Children
- 3. Creative Activities for Kids
- 4. One Stop CD Shop Vol. 1
- 5. WarCraft
- 6. Adventures for Kids II
- 7. Family Entertainment
- 8. Rebel Assault
- Top Ten Mac Pak
- 10. Doom II

## Top ten hardware

- lomega Zip Drive (storage) 1.
- StyleWriter 1200 (printer) 2.
- Hewlett-Packard DeskWriter 600 (printer) 3.
- 4. Hewlett-Packard DeskWriter 660c (printer)
- 5. Hewlett-Packard LaserJet 5MP (printer)
- 6. Umax S6e (scanner)
- 7. Apple CD600e (CD-ROM drive)
- 8. SyQuest 200MB PowerDrive (storage)
- 9. Visioneer PaperPort (scanner)
- 10. LaserWriter 12/600 (printer)

## Top five connectivity

- Farallon DIN-8 PhoneNet Connector
- 2. Global Village PowerPort Platinum 28.8
- 3. Supra 28.8 FaxModem
- 4. Apple Ethernet CS Twisted PairCard
- Apple Ethernet Thin Coax Transceiver 5.

## Top five utilities

- 1. Norton Utilities v3.1
- 2. Virex
- 3. At Ease v3.0
- Master Juggler
- RAM Doubler

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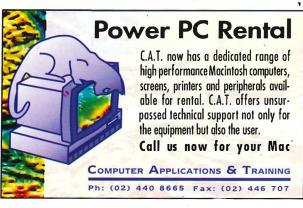


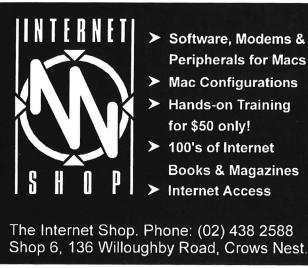






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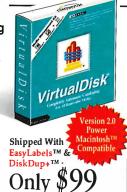
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## Copyright and completely wrong

he Australian Performing Rights Association (APRA) has issued legal demands against a couple of small Sydney Internet Service Providers (ISPs) in an attempt to secure a copyright charge of \$1 per annum per customer for music conveyed over the Internet. I find such an action morally contemptible and of doubtful legal validity: the evidentiary issues are horrendous. It also shows a complete ignorance of the nature of the Internet. Using my 28.8Kbps modem I'd be lucky to score scratchy 8-bit sound reproduction via Real Audio, and, if I did download or ftp a 16-bit musical work, would have to think twice before I took up 40–50MB of precious hard disk space for a single track. It's far cheaper for me to outlay money for the CD — even at the exorbitant Australian prices.

Hey, if they want to seek compensation for breaches of copyright then they would be best advised to go for the sites providing the sounds. Great PR to hit the users, guys. Me? I'm going to, for the first time, make a point of buying the cheaper CDs on the Net from suppliers in Britain and the United States. If this is the attitude of the APRA, I can and will reciprocate.

Apple has *finally* posted the International edition of the System 7.5.3 update. I haven't seen it on Australian servers yet, but it should be there by the time you read this. In the meantime, you can grab the sucker at http://www.support.apple.com/pub/apple\_sw\_updates/Worldwide/Macintosh/System\_S oftware/System\_7.5\_Update\_2.0/International/

Remember the RAM Doubler hack I mentioned back in June? Well, Connectix has now released a debugged version at ftp://ftp.connectix.com/pub/RAMDoubler/ There has been reports that this version causes problems for members of the PowerBook fraternity and people using GeoPorts on Power Macs—but I can't verify this.

Supra is offering freebie FlashRAM upgrades for most of its V.34 modems which will let them function at V.34bis (33.6Kbps before compression) speeds. See the Supra Web site at http://www.supra.com for further information.

## **Public domain software**

System Extenders. The KeyCommander control panel lets you assign key combinations to menu items, without changing the application resources á la ResEdit. Keys Off is a keyboard, mouse and power switch disabler which can be deactivated by a pre-set password.

Utilities. The latest version of ShrinkWrap will handle disk images of floppies, hard disks, removables and CD-ROMs, and hooks StuffIt compression on-the-fly. My favourite file and disk utility, File-Buddy, has also been updated. CopyPaste, which sup-

ports up to ten ClipBoards, is now Power Mac native and has a heap of new features. TechTool, the utility for low level analysis and repair, has also been way improved.

CompuServe Gems. WebNinja is a browser and URL manager with a handy Download Later feature. RAM Handler provides instant feedback on your RAM usage, and has some RAM compacting facilities. TitlePop creates a pop-up menu of all open windows.

Fonts. The great font displayer, PopChar, has been released in a System 7.5.3 bug-fix version. The latest version of Fonts Manager is also worth a look for those with big font suitcases.

Internet. Look@Me from Farallon lets you view another Look@Me or Timbuktu Remote user's Mac as they work anywhere on the Net. An oldie but a goodie, LeeMail, has been radically updated, and provides an alternative to Eudora or Claris Emailer. WWWChatServer is the only free implementation of the Web chat server protocol I've come across. It requires CGI-BIN access and PERL 5, and runs under Netscape 2.0. WhatRoute is a user friendly version of TraceRoute for those who want to trace TCP packets across the Net. WarpSearch is a fast server search utility that functions in both local and CGI models. Use it with WebSTAR, MacHTTP, NetPresenz or any Mac server software. MacSOUP is the best of the current crop of offline News readers. FMCGIC is a CGI application letting you link a Web server to a FileMaker application/database. Reprocussion is a powerful batch download utility for Netscape. Load up to 30,000 files, and it will download them automatically. You'll find it at http://170.158.8.250

Networks. NetLink Remote is a network extension that lets you use AppleTalk over a modem. It's way quicker than ARA.

Newton. Ideal for Mac gurus on the road, Newton Book TroubleShooting 101 is a Newton book which troubleshoots sick Macs running Systems 7 to 7.5.3. Newtscape creates Hypertext based Newton books and applications.

Graphics & Sound. Coloring Book is a super cool multimedia paint package for kids, which has even more features that KidPix.

Programming. Chipmunk BASIC continues to provide a nifty and complete old fashioned BASIC interpreter 'for the rest of us'.

Applications. Interfazed is a nice interactive portfolio presentation package, with a heap of features including support for multimedia presentations and wacky window design.

Games. MacChess plays a really mean game — too mean for dilettantes such as myself.

Weirdware. Trekkies will love mu' Haqwl' — a Klingon language analyser and dictionary.



News and software from the international networks, collected by Frank O'Connor.

What do you get when you mix Internet-ignorance with legal bravado?

# SoapBox

# Love and marriage



By Pamela Pfiffner

Does Adobe want to spend a little time apart?

pple and Adobe, Macintosh and graphics; they go together like a horse and carriage. Lately, I've been given cause to wonder if this is still elementary. As Adobe embraces the Internet, its eye is wandering from its Mac commitment. Has the Mac's middle age caused the largest Mac-software developer to look for fiscal fulfilment elsewhere? Judging by Adobe's latest moves, you might think so.

Adobe recently held a press event designed to herald its emergence as a major player in the Internet market. Adobe's new imaging technology, called Bravo, could do for the Web what PostScript did for paper-based publishing: enable the creation of graphics-rich, high-fidelity, device-independent content. But, unlike at Adobe events of the past, Apple was noticeably absent from Bravo's gala debut. Instead, Sun Microsystems, Microsoft, and Netscape Communications took centre stage, both in person and on videotape, which included glowing accolades from Intel's Andy Grove and a chummy aside from Sun CEO Scott McNealy. Conspicuously absent: Apple CEO Dr Gilbert Amelio and Internet Czar Larry Tesler, although Mr Tesler has since said his absence was due to time pressures brought on by Apple's Worldwide Developers Conference.

To be fair, Adobe CEO John Warnock and President Charles Geschke acknowledged that the Mac is the platform on which most graphics are created and that Bravo will run on the Mac OS as well as on Windows. But that was about it. Something seemed, well, wrong. Adobe sans Apple? Does this mean Adobe thinks if it wants to be a player on the Internet, Wintel and Unix are the only games in town? This, despite the fact that Mac users are more than two-and-a-half times as likely to be on the Internet as their Windows counterparts.

Days later, at WWDC, Tesler invited several prominent industry figures onstage to give feel-good sound bites about their companies' commitment to Apple. Sun's Chief Technology Officer, Eric

Schmidt, was positively ebullient about the prospect of working with Apple and making Java a key component of the Mac operating system. Netscape wunderkind and Newsweek cover boy Marc Andreessen

wunderkind and Newsweek cover boy Marc Andreessen was so caught up in the moment that he preannounced Netscape's intention to support Apple's OpenDoc

technology. Better yet, Andreessen said Netscape was doubling the size of its Mac development team every month.

In stark contrast was Warnock, who seemed ill at ease and uncertain, like a dinner guest called on to

praise the host after a badly prepared meal. Warnock fumbled for words until Tesler reminded him of current collaboration between Adobe and Apple, such as the bundling of the Acrobat 3.0 reader — code-named Amber — with Apple's Internet Connection Kit. Then Warnock perked up, offering that Adobe PageMill 2.0 supports QuickTime. That was all.

Maybe he was caught off-guard by Tesler's invitation. Warnock has a folksy delivery style that often does him a disservice in public. But I'll wager there's more to it than that.

## **Preaching Macintosh**

Think about it: If you'd been invited to speak to thousands of software developers a few days after you'd hosted the glitzy debut of your company's major new Internet strategy, wouldn't you seize the opportunity to promote your agenda? After all, these same developers may very well want to implement that technology too. Considering that the Mac OS ranks first in Web authoring and second in Web servers (right after Unix), it seems logical for Adobe to link its Internet strategy to the Mac.

I expected Warnock to say, "And we're looking forward to working with Apple to bring Bravo, our new Internet graphics engine, to the Mac platform". You can bet Macromedia head honcho Bud Colligan wouldn't have skipped the chance to tout Shockwave (one WWDC demo showed Macromedia's FreeHand with a Shockwave plug-in running inside a Netscape part within an OpenDoc-enabled version of Claris-Works — cool!). Warnock's omission doesn't make sense. Unless the Mac has lost its allure for Adobe.

I'm not suggesting that Adobe is abandoning its Mac customers; Warnock has assured me he fully supports Apple's efforts. No, Adobe is chock-full of talented Mac engineers who make great products. Besides, the company makes way too much money on its graphic-arts applications. But I'm not the only one who feels that Adobe's interest is wavering. "Adobe thinks it's wrung everything it can out of the Mac", an Apple insider told me.

Fair enough. Companies need to grow, and striking out in new directions is necessary for expansion. But as Adobe surely knows, the Internet is still new territory. The machine is merely the vehicle that takes us there. When it comes to Adobe applications, most of the company's customers drive Macs.

This apparent lack of interest may be just an instance of a long marriage in which one partner starts taking the other for granted. If that's the case, Adobe had best beware — there are lots of young suitors out there who'd love to be wed to the Mac's graphics and newborn Internet businesses.